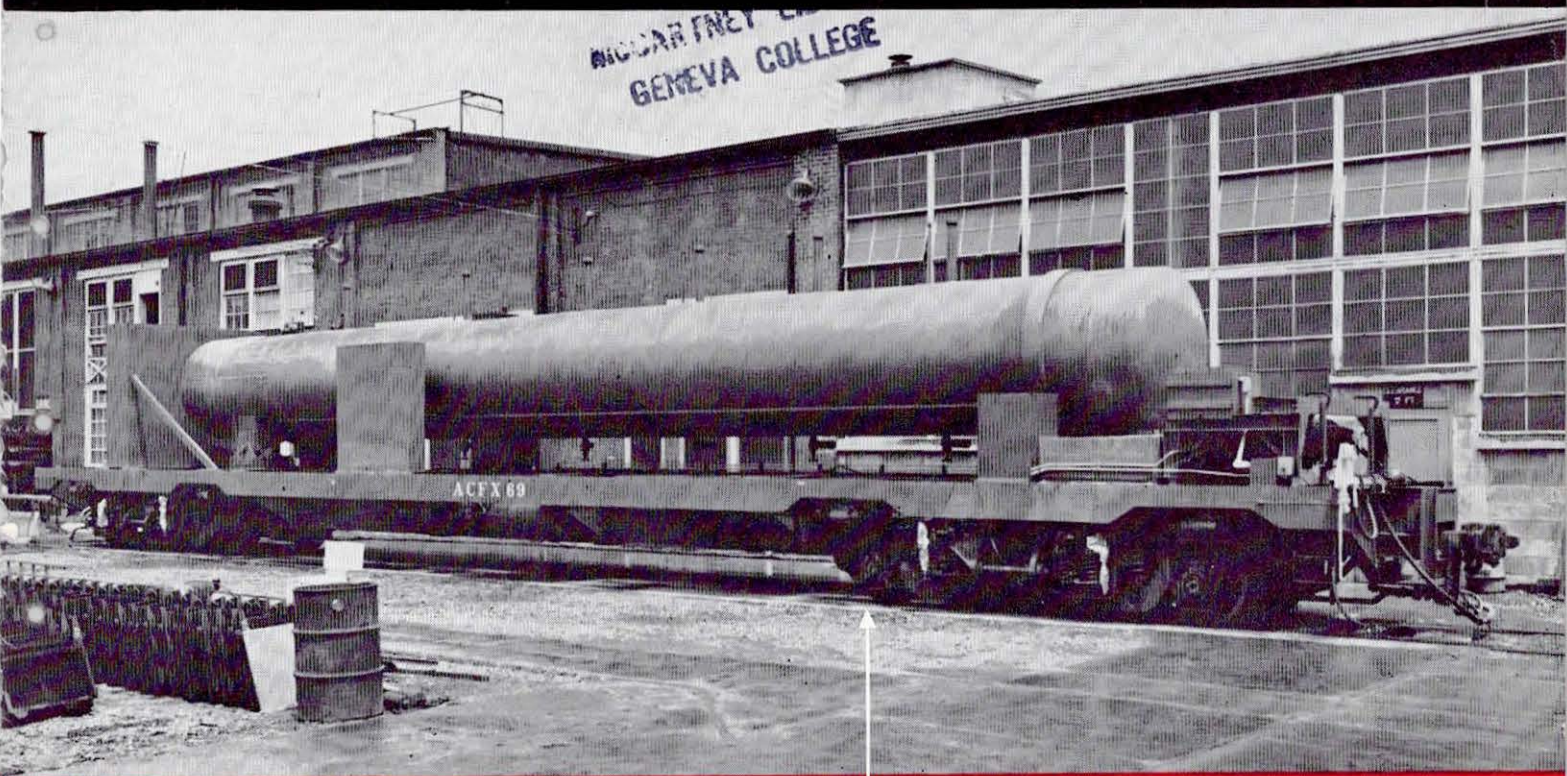
New 'Q' Freighthouse
Cuts LCL Handling Time

July 18, 1960

RAILWAY AGE *weekly*



'Pre-prototype' missile car is ready for work

Chicago Tests High-Speed Transit Trucks

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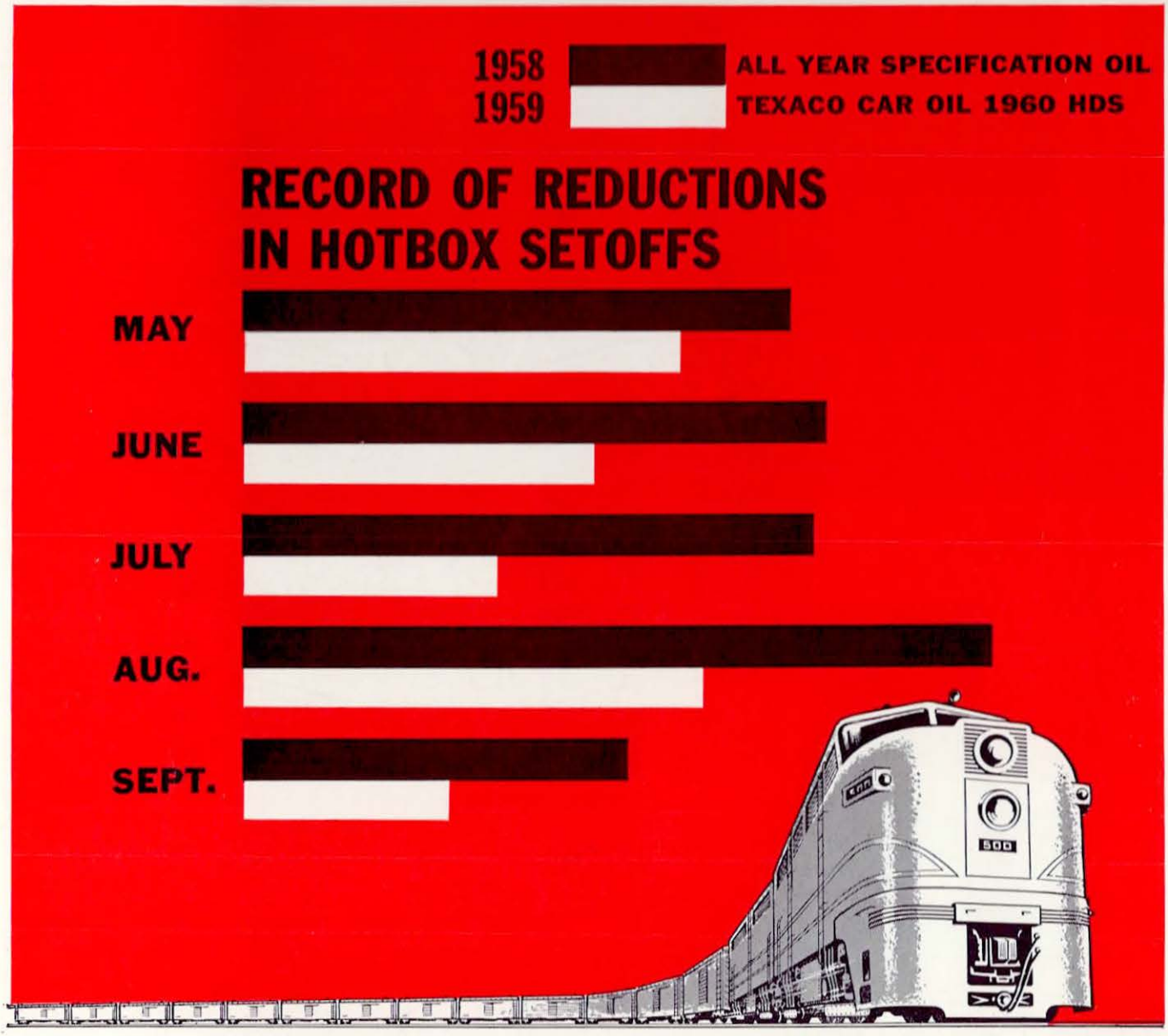

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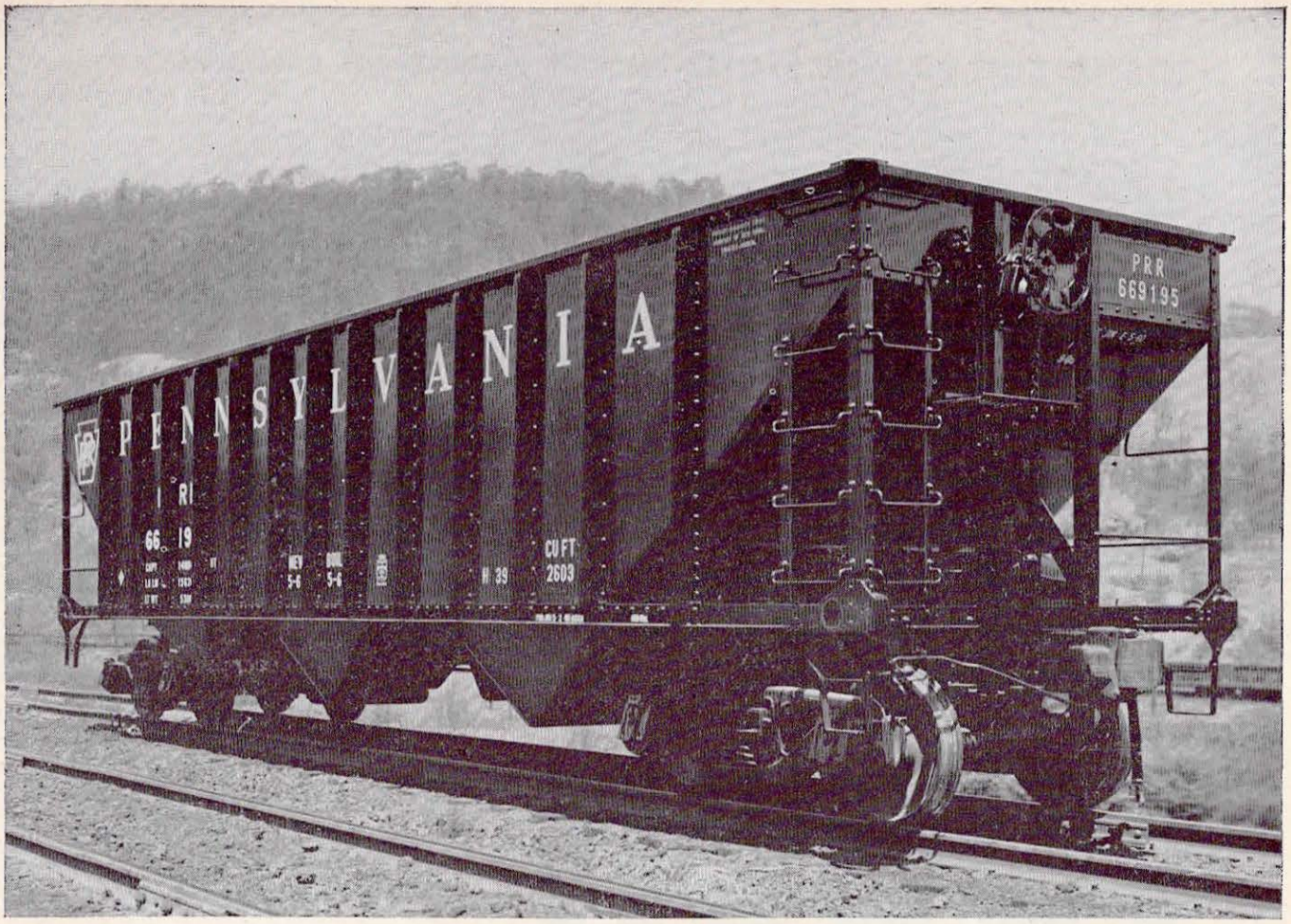

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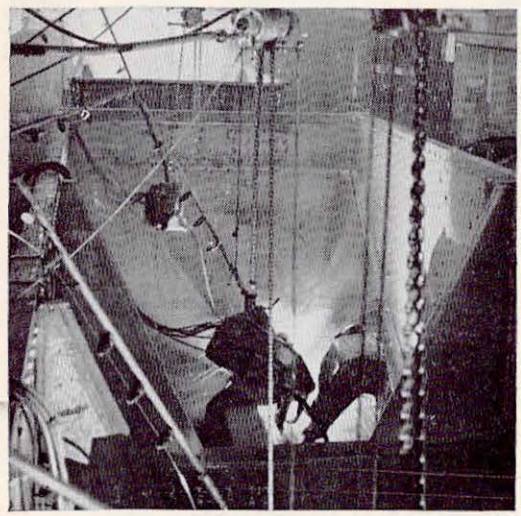

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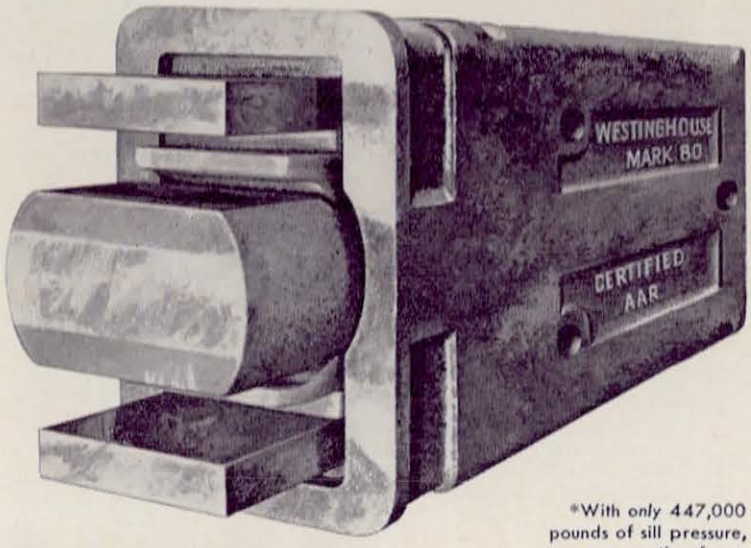

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RAILWAY AGE *weekly* July 18, 1960 • Vol. 149, No. 3

Week at a Glance

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Rules talks face new delay ..... p. 9

All signs last week pointed to a minimum six-week delay in the opening of management-union talks on work rules. The operating brotherhoods were expected to reject the carriers' proposal for beginning meetings on Aug. 2.

Democrats promise rail aid p.10

The party's 1960 platform, noting that "railroads are in distress," calls for federal aid to commuters; more freedom from regulation; and a national policy designed to "coordinate and modernize" transportation facilities in general.

Cover Story—'Pre-prototype' missile car is ready p.16

The unit, designed and built by ACF, resembles a hybrid between a flat car and a tank car. It has been subjected to a series of road and impact tests. An actual prototype car is expected to be built later this year.

Cover Story—Chicago tests high-speed transit trucks p.20

The city's Transit Authority will begin operating four-car test trains this fall. One train will be equipped with four special high-speed trucks, each of different design. The cars have control cabs at both ends and can be operated as signal cars.

Cover Story—New 'Q' freighthouse to cut LCL handling time p.24

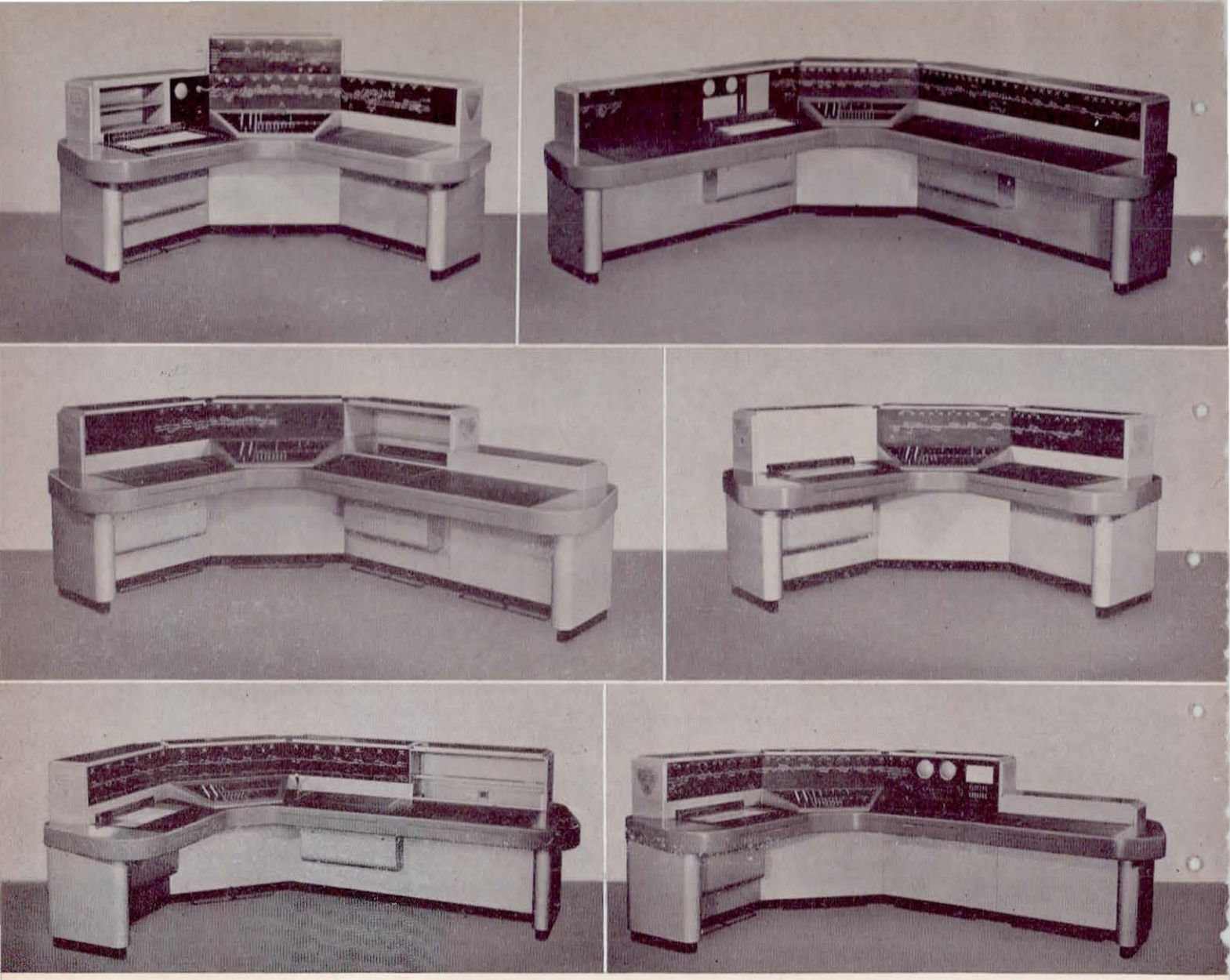
The $1,750,000 facility, at North Kansas City, is designed to expedite transfer of merchandise between railroad cars and highway trailers. Among its features are unbroken roof lines in the warehouse, and prestressed, precast concrete floor slabs in the office building.

Rules—not workers—are target p.31

Charges that the railroads have "slandered" their employees during the work rules dispute aren't supported by the record. Here's what management has actually said about the railroad work force.

The Action Page—Conserve 'political capital' p.50

Railroads have a reservoir of good-will on deposit with governmental authorities. This political capital, however, is limited. It should be used with discrimination—in behalf of projects likely to provide a financial return to railroads.



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Week at a Glance CONT.

Current Statistics

Operating revenues	
5 mos., 1960 ...	$4,064,090,155
5 mos., 1959 ...	4,125,693,993
Operating Expenses	
5 mos., 1960 ...	3,195,545,311
5 mos., 1959 ...	3,229,846,918
Taxes	
5 mos., 1960 ...	450,170,907
5 mos., 1959 ...	438,663,308
Net railway operating income	
5 mos., 1960 ...	273,263,469
5 mos , 1959 ...	324,315,344
Net income estimated	
5 mos., 1960 ...	195,000,000
5 mos., 1959 ...	234,000,000
Average price railroad stocks	
July 12, 1960 ..	93.59
July 14, 1959 ..	115.15
Carloadings, revenue freight	
26 wks., 1960 ..	14,292,177
26 wks., 1959 ..	17,840,396
Freight cars on order	
June 1, 1960 ..	36,106
June 1, 1959 ..	36,869
Freight cars delivered	
5 mos , 1960 ...	25,360
5 mos., 1959 ...	14,322

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Short and Significant

There will be no general investigation . . .

by the ICC of tariffs with provisions authorizing containerized freight to be shipped on a net-weight basis outbound and free return of used containers to the origin point for further use. The Commission has denied the Fibre Box Association's petition for such an inquiry, which was opposed by the railroads. The denial order said lawfulness of such tariffs is a matter to be determined on the case-by-case basis.

A new $20 million electronic yard . . .

will be built by the merged Atlantic Coast Line-Seaboard Air Line if the proposed consolidation of the two roads is accomplished, according to proxy material mailed to stockholders. An additional $2.4 million is to be spent for expansion of several existing yards, for connecting tracks, and for removal of facilities no longer needed. Other planned expenditures include approximately $6 million for installation of additional traffic control signals and changes in communications facilities; approximately $4.3 million for consolidation of heavy repair facilities; and $14.5 million for financial protection of employees whose employment will be adversely affected by the merger. Stockholders of both roads will vote on the merger plan August 18 in Richmond, Va.

No interim increase in divisions . . .

will be granted northern railroads in the pending cases involving their bid for larger shares of rates between Official and Southern territories. The ICC has denied the northern lines' petition for an order fixing expedited procedures in the cases or, in the alternative, a procedure for the granting of interim relief.

President Eisenhower has vetoed . . .

the bill which would have made the government-owned Alaska Railroad subject to regulation under the Interstate Commerce Act, and subject to railroad safety laws and the Federal Employers' Liability Act. The bill was rejected by the President on the general ground that it would "subordinate certain of the President's statutory powers to those of a regulatory commission."

C&O is standing by its initial offer . . .

to gain control of the B&O (RA, July 4, p. 9). Citing dividend advantages it asserted B&O stockholders would receive if they exchanged their shares for C&O stock, the road made no attempt to counter a higher NYC stock-and-cash package offer to acquire 60% of B&O's common.

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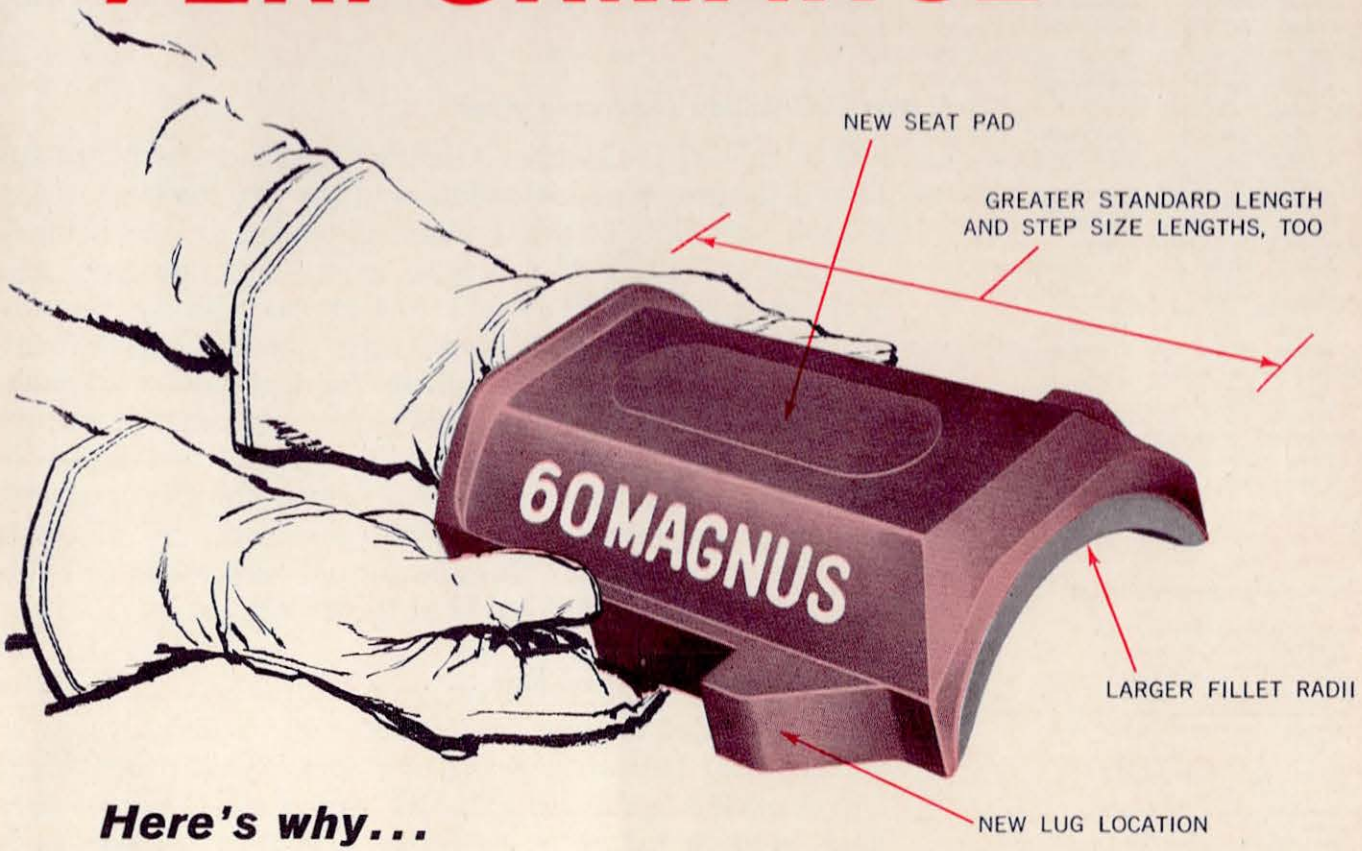

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Rules Talks Face New Delay

► **The Story at a Glance: Both the carriers and the operating unions profess eagerness to get work rules talks under way—but all the signs point to a minimum six-week delay.**

Carriers conference committees proposed meeting with the organizations' committees beginning Aug. 2—but according to brotherhood sources operating unions are rejecting that date and indications are they won't be ready to talk before September. The carriers proposed meeting with BLF&E representatives July 19 on the fireman-off issue—but the Firemen, too, are expected to say no, not so soon.

Meanwhile, negotiations are continuing on the last remaining wage cases. Emergency boards have recommended that the SUNA accept the established pattern settlement and that the carriers and the non-ops work out a wage-benefit package which would fit the pattern.

A waiting game may be shaping up, now that the carriers and the operating brotherhoods have swapped refusals on proposals for studying the complex work rules issue. And it's the organizations who appear to be setting the brakes on any early across-the-table bargaining.

At least four unions—BLE, BLF&E, BRT, and ORC&B—last week were expected to reject management's suggestion that sessions begin Aug. 2 in Chicago. The BLF&E, invited to start discussing the fireman question even earlier, apparently will turn down a suggested July 19 meeting. President H. E. Gilbert was in Los Angeles, Calif., last week and wasn't due back at his Cleveland, Ohio, office until July 18.

Top level representatives of all five operating organizations, including SUNA, were meeting in Cleveland last Thursday, July 14, to draft a reply to the carriers. Pending completion of their job, the only comment coming from the session was that the Aug. 2 proposal of the carriers would be rejected because of prior commitments of all the brotherhood presidents. Chiefs of the organizations had planned a meeting for the same day, one union source said, and the Railway Labor Executives Association is slated to meet later that same week in Washington. Beyond that, individual chiefs are reportedly committed to other matters during August—one, for example, cites important union meetings in opposite ends of the country. Another union source points to August's status as a vacation month.

Thus the outlook is for the dispute to continue in a state of suspended animation, or perhaps animated suspension. There won't be much action—but it's a safe bet that neither party to the dispute will let the issues fall from public attention. The big four operating brotherhoods, for example, last week bought time on a Washington, D.C., radio station for spot announcements interspersed with the station's coverage of the Democratic national convention. General theme of the spots was to be institutional—but the unions also planned to plug their proposal for a study commission on the railroad situation.

(This organization proposal got a turn-down from the industry, principally because its findings would not be binding and its area of inquiry would be unlimited. The carriers proposed instead that a study group be empowered to investigate the current rules demands together with specific bargainable counter-proposals which the unions might wish to submit. Under the industry plan, the commission's findings would be binding—a condition the brotherhoods refused to accept.)

The unions can be expected to squeeze maximum mileage out of their announced "nothing-to-hide" stand on the commission situation. Already, chiefs of the big four operating brotherhoods have charged that, by rejecting the union proposal, "carrier representatives have broken faith with the public and have pushed the industry closer to a major labor-management crisis."

So the dispute meanders toward autumn. Union chiefs declared previously that 30 to 60 days might pass before they could get authorization from the membership to negotiate nationally, before they could organize negotiating committees. Now prior commitments have been advanced as another reason for shoving the talks toward cooler weather. And, though few will concede its validity as a factor, there may be a desire to hold back to read the gauge of public opinion as expressed in the November elections.

While the rules dispute marked time, negotiators moved slowly toward a wrapup of the remaining wage disputes. Top item of the week was an emergency board report recommending that the Switchmen accept the pattern established by the BLE arbitration award. After that award and its subsequent acceptance by the ORC&B, plus recommendations for a similar

(Continued on page 31)

C&NW Asks Slowdown Damages

The Chicago & North Western has taken legal action against employees allegedly provoking a wildcat slowdown at its Proviso yards. In a suit filed in the Circuit Court of DuPage County (Ill.) the C&NW is seeking to recover damages of $16,100 from three members of the BRC.

The complaint, dated July 1, charges the three individuals with "provoking, fomenting and participating in an unauthorized slowdown strike and work stoppage" on three separate occasions. Because of the slowdown, the railroad claims, it was forced to bring in personnel from other stations and freight yards to keep the work on schedule. The cost of paying and transporting the extra help was "in excess of $16,000."

The carrier claims the slowdown was in violation of the Railway Labor Act and notes in its complaint that "no labor grievance or dispute exists and the aforesaid acts of defendants have not been authorized and have not been ratified by the [Brotherhood of Railway] Clerks."

An answer to the complaint is returnable within 30 days.

Democrats Promise Rail Aid

The Democrats adopted a 1960 platform last week calling for federal aid to railroads amid reports that their standard-bearer, Senator John F. Kennedy, planned to make a strong pitch for the commuter vote.

Hours after his nomination, Senator Kennedy's aides were reported to be working on a mass transportation program designed to appeal to voters worried by recurring "commuter crises" in urban centers.

Meanwhile, the official party platform promised, in its shortened version, that "a new Democratic administration will expand federal programs to aid urban communities to . . . transport suburban commuters to and from their jobs. . ."

The full text of the platform, which was not generally covered in the press, went on to announce Democratic support of "federal assistance in meeting certain capital needs [of railroads], particularly for urban mass transportation."

The platform (shortened version) also said: "Over the last seven years, we have watched the steady weakening of the nation's transportation system. Railroads are in distress. Highways are congested. Airports and airways lag far behind the needs of the jet age.

"To meet this challenge we will establish a national transportation policy, designed to coordinate and modernize our facilities for transportation by road, rail, water and air."

The full text added: "The railroads are in particular need of freedom from burdensome regulation to enable them to compete effectively with other forms of transportation."

Transportation planks are nothing new in party platforms. The Democrats have had one in every platform since 1940. With the exception of 1952, the Republicans have been writing transportation planks at every convention since 1932.

Both parties, four years ago, made general statements on transportation without singling out any one mode as requiring more attention than the others. Both contented themselves, in the main, with endorsing a transportation system in which each mode would have the opportunity to realize its inherent advantages and full competitive capabilities.

Watching Washington *with Walter Taft*

• **ICC RULES** for filing fourth-section applications will be more to the railroads' liking than the proposed rules which the Commission served on railroads and water carriers more than two years ago. After considering comments of the carriers and the National Industrial Traffic League, the Commission has gone along with many railroad suggestions. As thus modified, the rules will become effective Sept. 1.

THE RULES involved are those proposed in Fourth Section Order No. 18900, issued by the Commission April 11, 1958. They will govern the form and content of applications for relief from the long-and-short-haul and aggregate-of-intermediate provisions of the Interstate Commerce Act's Section 4.

UNLESS the Commission grants relief, those provisions, in turn, make it unlawful for railroads or water carriers to charge more for shorter than for longer hauls over the same routes, or to charge more as a through rate than the aggregate of local or intermediate rates. There are now no fourth-section filing rules. Those formerly in effect were removed from the Commission's Rules of Practice in 1942.

IN OBJECTING to some of the proposed rules, the railroads had NIT League support. Generally the railroad position is that filing rules should not include specifications calling for showings as to the merits of relief sought. The Commission's report reflects general agreement with that approach. While it does not make all modifications the railroads requested, it does embody several of them.

ELIMINATED, for example, is a proposed requirement which would have called for a showing of the "basis" for rates at intermediate points where relief from the long-and-short-haul clause is sought. Here the Commission emphasized, however, that the rules will still require applications to show that actual intermediate-point rates would be reasonable.

OTHER BREAKS for the railroads are deletions of proposed requirements that applications contain evidence that proposed fourth-section-relief rates would be no lower than necessary to meet competition, that such rates would attract sufficient traffic to more than offset the loss of revenue resulting from reductions involved, and that applications based on market competition contain evidence as to the amount of traffic at stake.

REJECTED, however, was the railroad proposal that the Commission extend, to all long-and-short-haul cases, the general relief it granted in Fourth Section Application No. 33656. That embodied a determination that commodity rates producing minimum revenues no lower than charges on 30,000 lb at the corresponding Docket 28300 Class 20 rate would meet the "reasonably-compensatory" requirement. The Commission called this a "carefully limited" determination, general application of which had not been justified.

PROCEDURAL CHARACTER of the filing rules was emphasized by the Commission as it ordered the modifications. The changes, it said, "do not, and cannot, abridge in any respect the scope of the Commission's authority in considering and disposing of applications on their merits."

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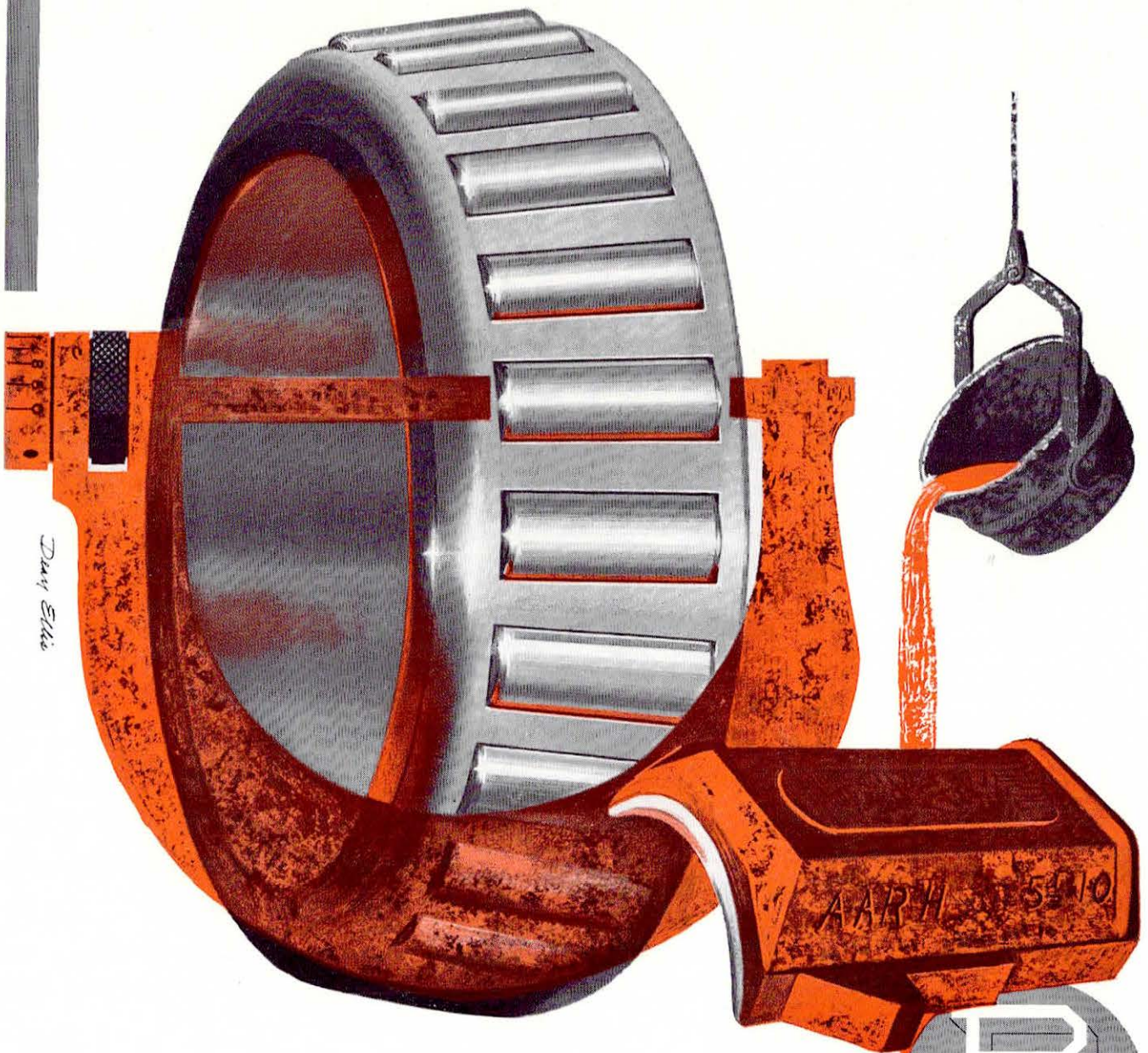

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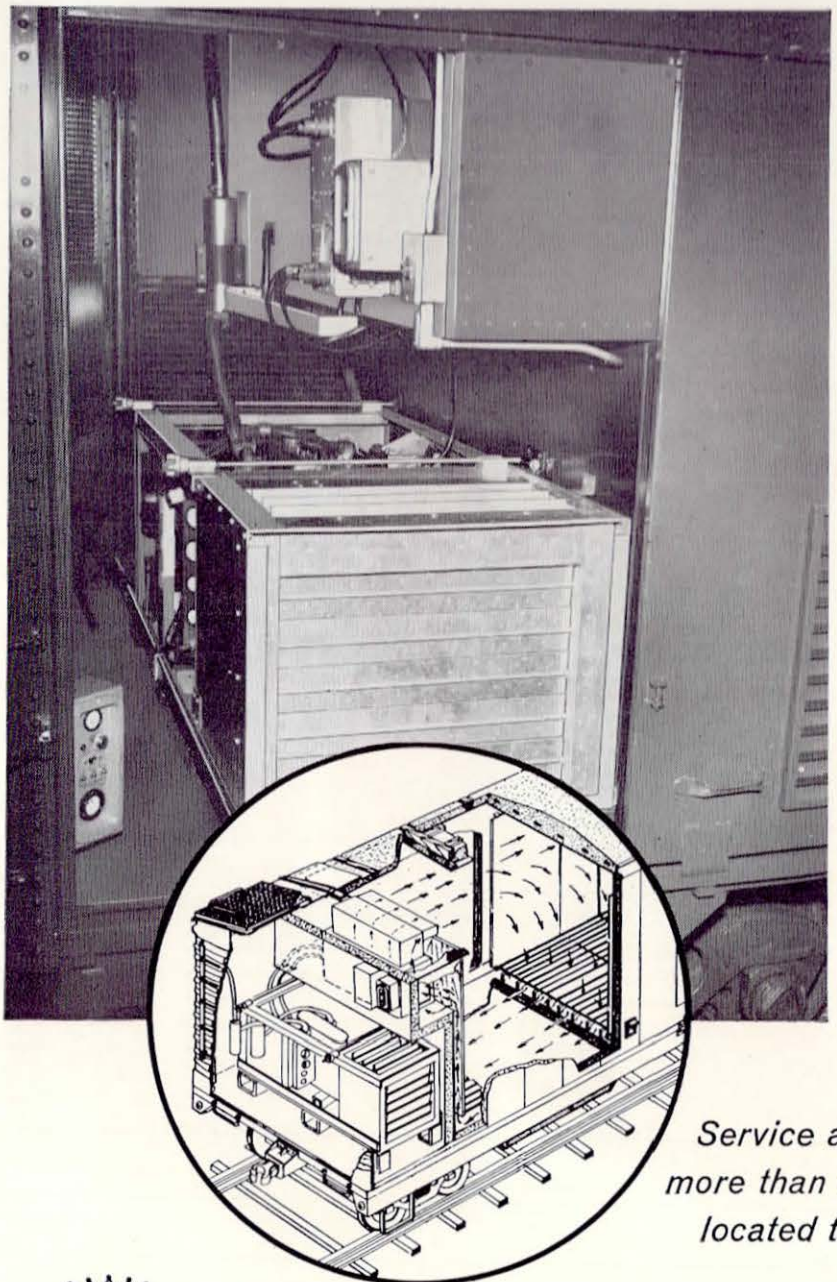

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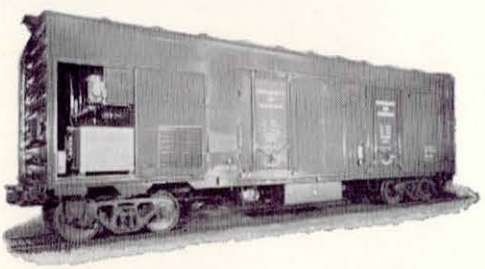

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RR Purchases Over-Inspected?

To the Question and Answer Editor:

I would like to comment on the letter which appeared in the May 2 issue [p. 14] under the heading "RR Purchases Over-Inspected?"

Our company is the largest commercial inspection and testing organization in Canada. We have provided industry wtih these services for the past 70 years.

We have found there is an ever-increasing demand for competent, independent services such as our company offers. The tendency in our age for mass production, assembly line procedures, etc., has to some degree seriously affected the "pride of craftsmanship" prevalent in the era preceding the 1930's. Further, the complexity of materials used in our industrial world today gives rise to an increasing demand for specialized phases of quality control.

Due to the ever-increasing costs of labor in the North American continent, new materials must be designed and formulated at ever-decreasing production costs if we are to maintain a competitive place in the world's markets. With this refinement of specification, the necessity for precise quality control and inspection is becoming ever more apparent. From the point of view of the manufacturer, it is extremely costly to rely on the so-called "performance testing" by the consumer and most unsatisfactory from the point of view of the consumer.

In modern laboratories this "performance testing" can be accomplished through accelerated testing techniques, thus assuring both manufacturer and consumer a product which will meet the specified service requirements. Surely, modern technology has advanced beyond the "trial and error" stage, particularly in the protective coating field, where the development of new materials has been outstanding during the last decade. And, surely, this development has not been the result of "trial and error" techniques.

Our company is particularly proud of its participation in the improvement of inspection and testing technology, and very definitely the techniques in common practice 10 years ago have been replaced by improved methods.

A forum for railroaders who want to explore questions of importance to their industry, this column welcomes both questions and answers from readers at all levels of responsibility in the industry and associated fields. We'll pay $10 to any reader submitting a question that forms the basis for a column discussion. Address correspondence to Question and Answer Editor, Railway Age, 30 Church St., New York 7, N.Y.

The May 2 letter seems to suggest that elimination of quality control and research on an applied scientific basis would result in lower costs to the railroads. However, we feel that only continued research and continuing application of quality control principles will succeed in reducing the operation costs of our railroads.—*Byron T. Kerr, P. Eng., vice president and managing director, The Warnock Hersey Company Ltd.*

Why Not Uniform Piggyback Numbers?

To the Question and Answer Editor:

Your March 21 column [p. 18] introduced a most sensible suggestion that all freight car equipment be numbered in a uniform manner to provide definite identification as to its specifications or class. Subsequent discussion pointed to the obvious handicaps in accomplishing this, but it can be done through a carefully planned program even though completion would require considerable time.

However, the "piggyback" operation is in its infancy, and again history is repeating itself in that the different length vans, open-top trailers, container types, and so on, are being assigned numbers indiscriminately and apparently without any uniformity that would provide a clue to their type or specifications. Now is the time for all railroads and railroad equipment organizations to reach some understanding on this same problem and adopt a uniform system for numbering the trailers as well as flat cars assigned to such service, so their serial numbers will identify the equipment as to size, type, and so on. At present only a small percent of piggyback equipment is interchanged between railroads—some of it is of such special design that it will probably never leave home rails—but the continuing fast expansion of this service indicates the desirability of now making effective some program for having it numbered so all concerned may know that the equipment in a given series will be the same size and type regardless whose reporting marks are shown.—*Elmer A. Duncan, transportation department, B&O.*

Why End Grab Irons?

To the Question and Answer Editor:

I observed a letter in Railway Age [May 30, p. 44] written by Harry See, National Legislative Representative, BRT, concerning my comments about the use of grab irons.

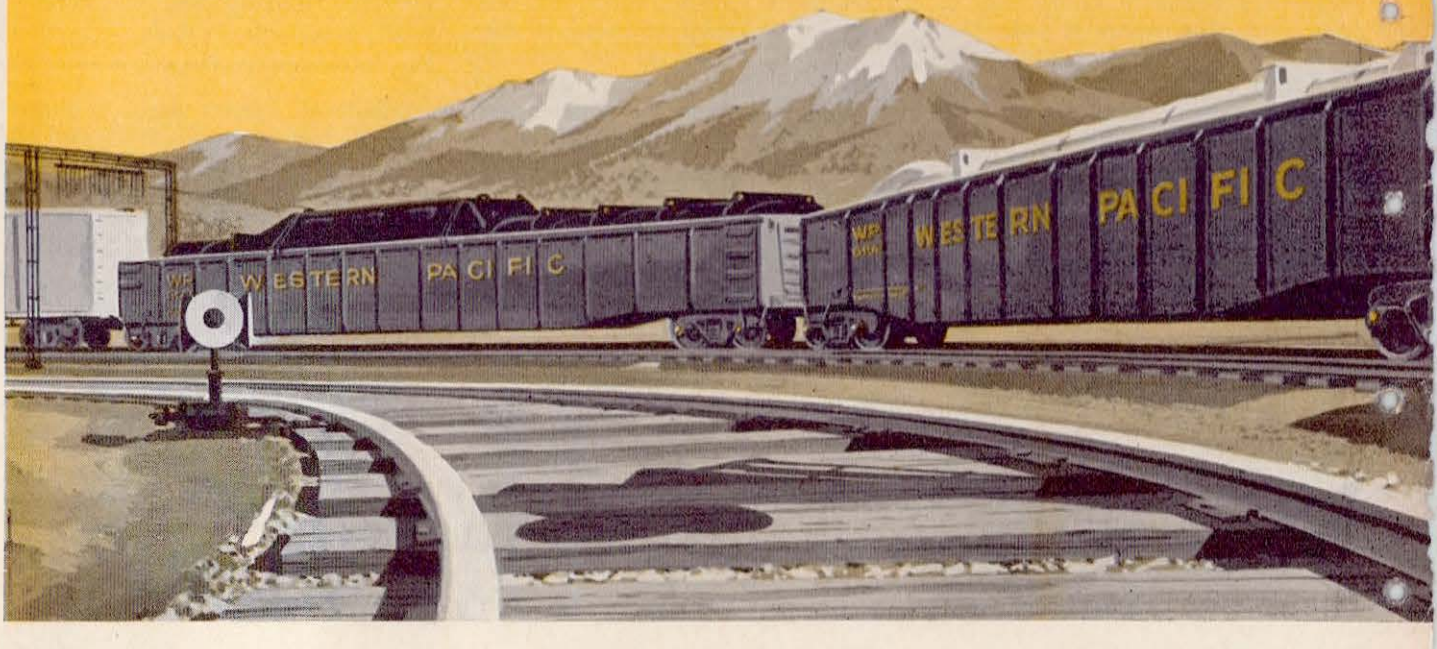
Mr. See spoke of grab irons on the sides of cars contrary to my comments. The first paragraph of my letter in Railway Age (Feb. 22, p. 19) stated: "Every freight car on American railroads is equipped with two grab irons at the *bottom* of *each end of the car* making a total of four grab irons per car."

This reference is not made concerning grab irons on the *side* of *cars* near the end. I fully agree that grab irons on the sides of cars above the sill step serve a good purpose when it is practical to ride with feet placed on the sill step.

Those grab irons on the end sill of cars should serve a purpose or be removed. I am still curious to learn the purpose for which they are intended.—*J. B. Robinson, Sr., assistant superintendent, Western Maryland.*

What's the KAR-GO Record on the Pay-off Runs?

"Terrific," says Western Pacific



Load a freight car with 70 tons of steel—put it in high-speed, virtually nonstop service on tough mountain runs—operate it day and night for two years – and you really find out how good its bearings are.

That's what Western Pacific did with two KAR-GO equipped drop-end gondola cars.

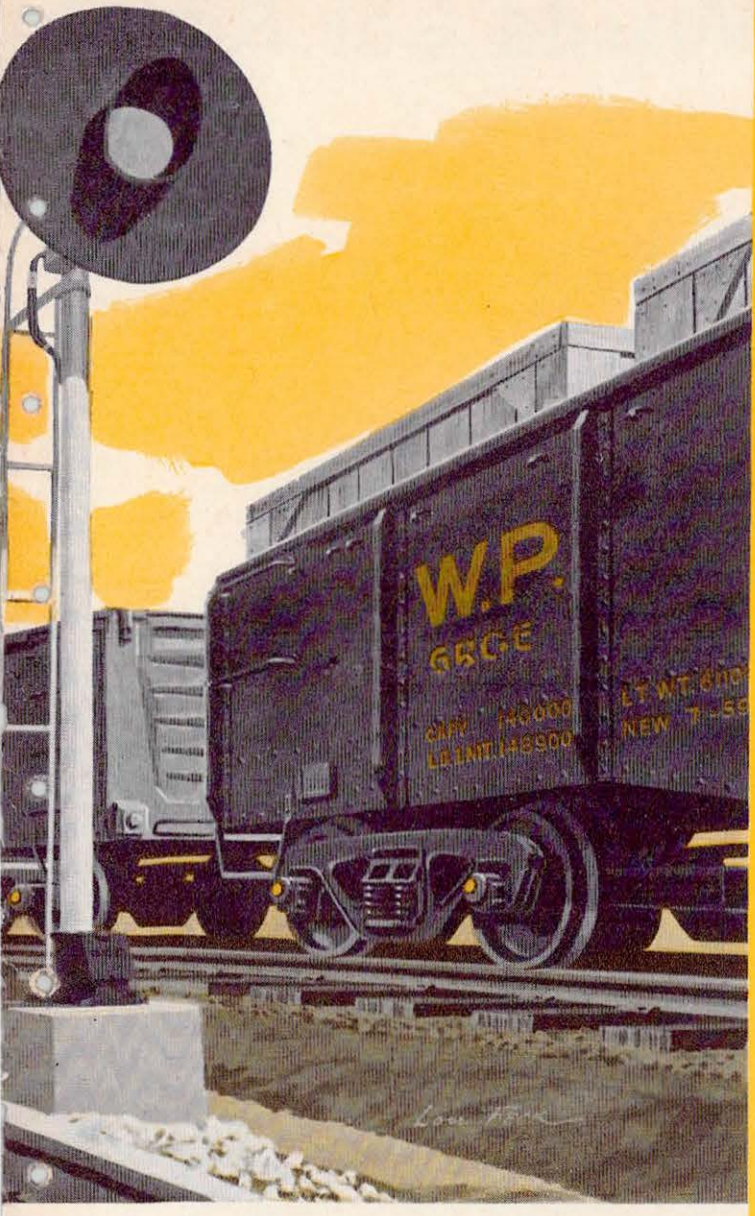
Result? After almost 140,000 car-miles of this tough service, the KAR-GO bearing performance resulted in a reorder by Western Pacific for an additional 60 KAR-GO equipped gondola cars.

You can eliminate hot boxes and get really dependable service from your car bearings by going the KAR-GO route as Western Pacific has done. You'll also cut your maintenance costs way down.

38 other railroads are operating KAR-GO equipped cars and are finding out that routine lubrication and inspection costs average less than 10% of the cost of servicing journal brasses.

The moneysaving KAR-GO way is the best route to take in your next freight car conversion or new car build program.

KAR-GO, ALLISON DIVISION OF GENERAL MOTORS
Indianapolis 6, Indiana



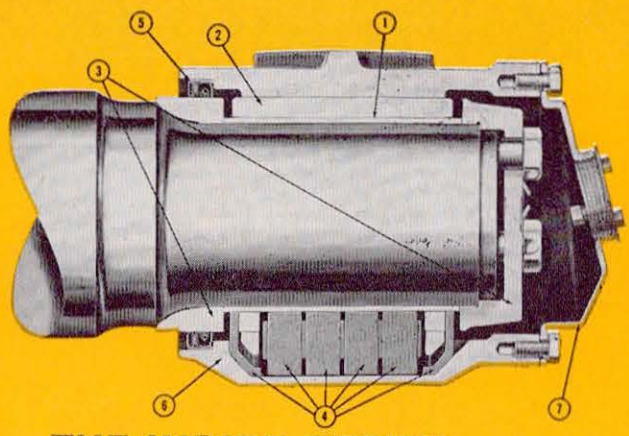
Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison connecting rod and crankshaft main bearings and piston-pin bushings

Allison

KAR-GO

JOURNAL BEARINGS

A product of and built only by the Allison Division of General Motors



THE INSIDE STORY

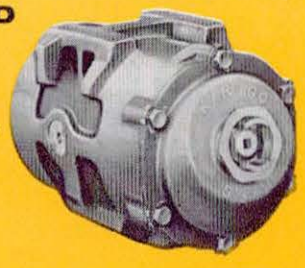
Built to run for thousands and thousands of miles, the Allison KAR-GO Cartridge Bearing gives you a *sure* answer to the hot-box problem at a low, low cost.

1. **JOURNAL SLEEVE**—Smooth, hardened surface for maximum bearing life — eliminates axle wear.
2. **ALUMINUM ALLOY BEARING** — Economical, precision-fitted, full round for maximum heat dissipation and prevention of axle roll-out.
3. **THRUST RING AND CAP**—Absorb lateral thrusts on hardened faces. Ring provides highly finished surface for oil seal.
4. **FELT WICK LUBRICATOR**—Insures adequate oil delivery to bearing—spring-loaded to make constant contact with journal sleeve.
5. **OIL SEAL**—Double lip, automotive type; keeps oil in and dirt and water out.
6. **HOUSING** — Rugged pearlitic malleable iron; completely encloses entire assembly; eliminates need for separate adapter.
7. **COVER ASSEMBLY**—Provides sealed closure, oil-filler plug and pressure-relief valve.

AAR APPROVED

for limited application in general interchange service

Having complied with standardization details, AAR approval has been obtained for wider application to freight cars in general interchange service.



Keeps lubricant sealed in—dirt sealed out.

Adapts to standard sideframes – without separable adapter.

Requires oil level inspection only twice each – year.

Guards against train delays.

Offers lowest-cost solution to the hot-box problem.

'Pre-Prototype' Missile Car Ready

► **The Story at a Glance: The Air Force decision to operate roving missile trains over U.S. railroads has added a new dimension to the rail carriers' role in national defense. The trains will serve as launching platforms for the Air Force's Minuteman intercontinental ballistic missile.**

Apart from the operational problems such trains may present, railroad officers will be seeing some new and unusual rolling stock in the months ahead.

Most preliminary work on the first missile-carrying car has been completed, and a "pre-prototype" unit has actually been built. American Car & Foundry Division of ACF Industries designed and built the unit as a subcontractor to Boeing Airplane Company, associate prime contractor for the Minuteman program. The other subcontractor in the car program is American Machine & Foundry Co.

When the next "random" test of a simulated missile train begins at Ogden, Utah, the train's consist probably will include a car resembling a hybrid between a flat car and a tank car.

This unusual unit, stencilled ACFX69, is a "pre-prototype" of what is expected to evolve into an operational missile car. From the floor down, the actual missile-carrying car is not likely to change greatly from the present design—cushion underframe with 15-in. travel, six-wheel trucks of a modified passenger-car type, roller bearings, air and coil spring suspension, 33-in. wrought steel wheels.

The superstructure will be entirely different, of course. The tank and boxes on the pre-prototype unit are merely to simulate the weight, and weight distribution, that is expected when the car is completely equipped and loaded with a Minuteman missile.

TRAVEL GAGES measure impact when pre-prototype missile car is bumped by loaded hopper car.

for Work

The missile-train idea was developed by the Air Force to supplement fixed-base launching sites for operational missiles. The theory is that missile trains, roaming the nation's rail network in "random" patterns, will not be susceptible to surprise attack.

ACF designed and built the pre-prototype car in less than four months. The critical job was to design into the unit the necessary cushioning required to prevent shock or vibration from being transmitted to the weapon. A missile is, by nature, a delicate complex of fuel and instruments; it must be handled carefully to minimize chances of not being operational when, and if, needed.

The pre-prototype car is an 85-ft unit (79 ft, 6½ in. over strikers); its width is 9 ft, 9 in. over side sills, and the floor is 4 ft, 7 9/16 in. above the top of the rail. Subsequent design changes in the missile or other equipment may require proportionate changes in the size of the car. Also, the car will be equipped with standard safety appliances (such things as uncoupling rod, hand brakes) before being released for testing in the simulated missile train.

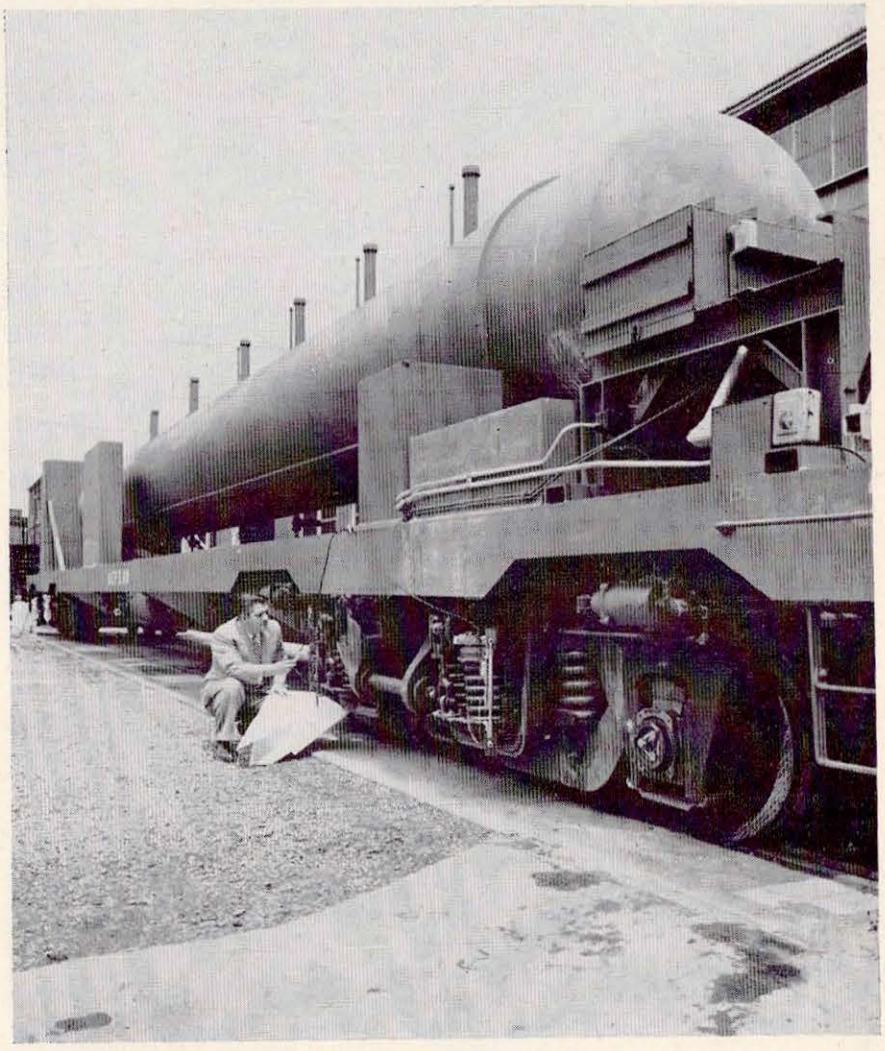
The six-wheel trucks of the test car were made by General Steel Castings Co. to specifications developed by ACF. The truck suspension system includes an air-spring system to supplement conventional coil springs. ACF engineers say the air springs are self-adjusting and are required to maintain coupler heights within prescribed limits since there will be a substantial weight differential between a loaded missile car and one running light.

The present car has been subjected to a series of road and impact tests. On the basis of the tests, the suspension system and cushioning unit fully meet specified design requirements.

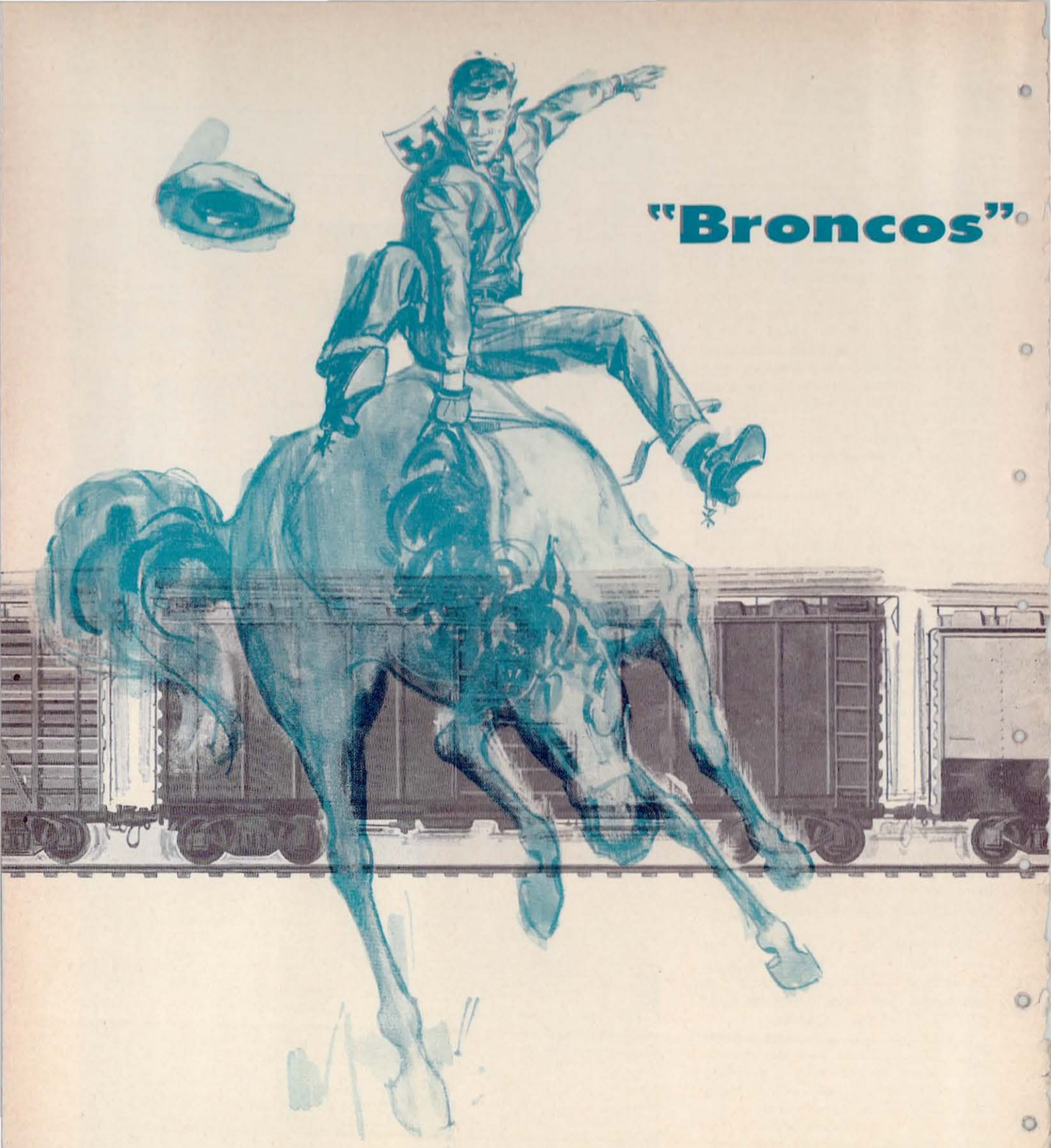
A prototype car, embracing a completed superstructure and the missile-firing control mechanisms, is expected to be built later this year. Details about this portion of the car—as well as the number of cars contemplated in the initial order—have not yet been made public.

One thing that is definite, however, is that each car in the contemplated missile trains, as well as the trains themselves, must meet extremely high reliability factors established by the military. These factors, including schedule dependency, mechanical reliability and the like, are presently under study by Defense Department and railroad officers.

HIGH-SPEED CAMERA records tests by filming distance the travel gages move during controlled coupling impacts.

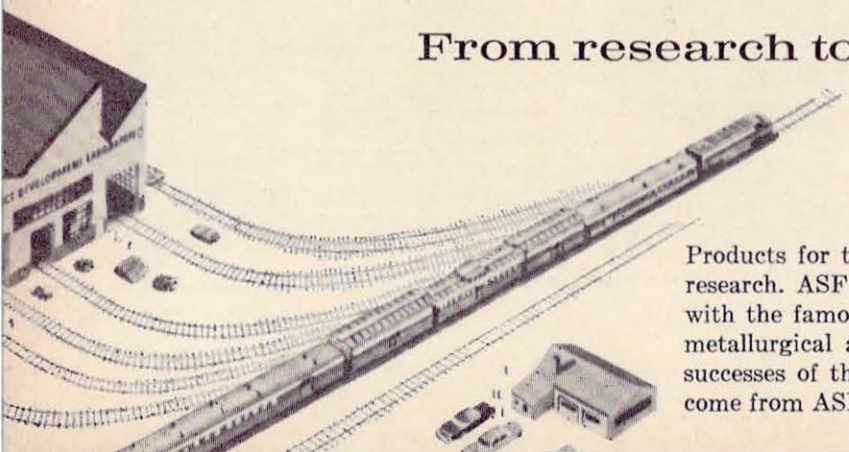


"THREE-WAY STRETCH" in trucks cushions load against transverse, longitudinal and vertical shocks.



From research to reality

in railroad progress



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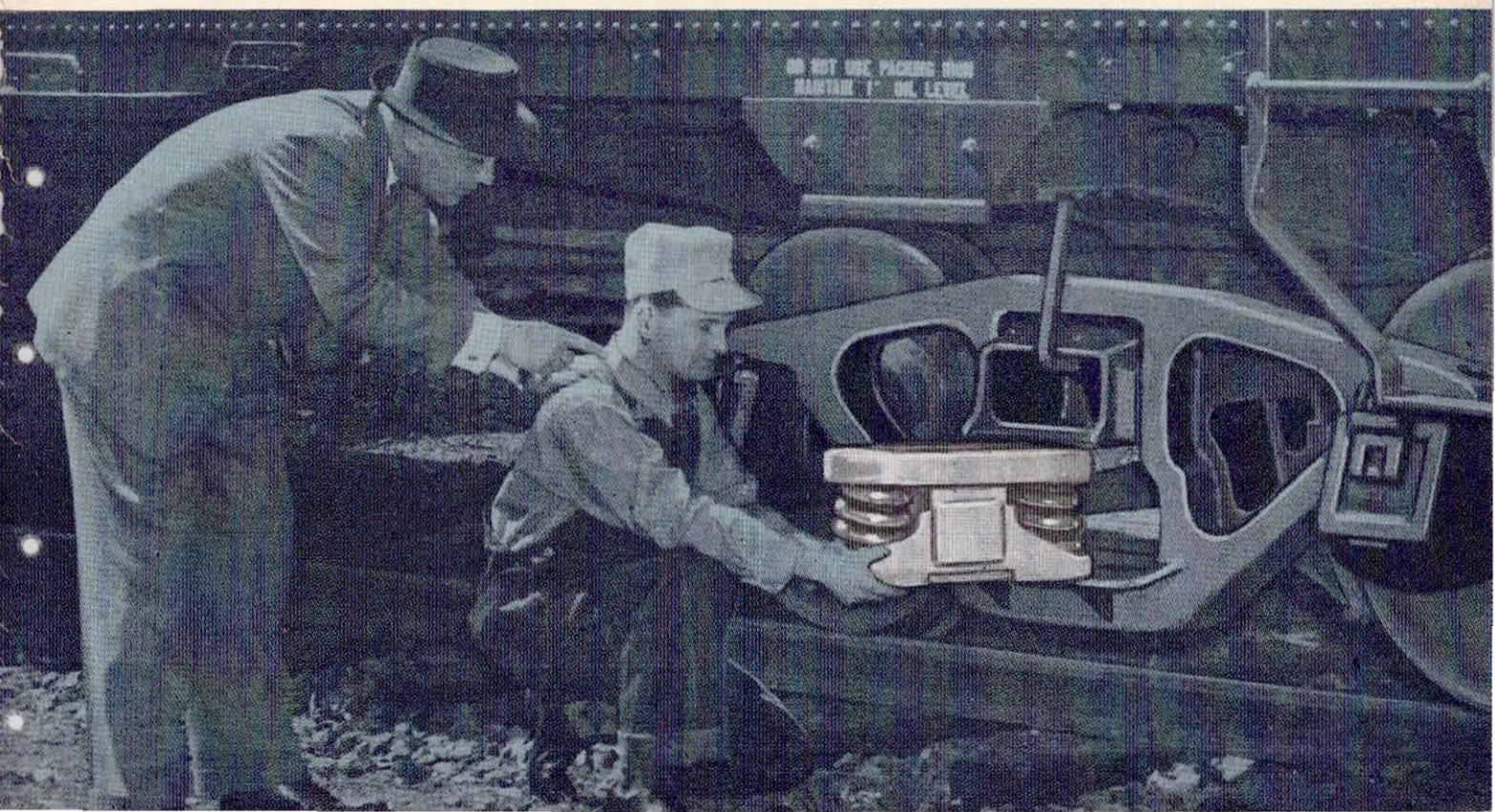


NEW CARS built by St. Louis Car Co. with controls at both ends have high-speed test trucks.

Chicago Tests New-Type Trucks

The Chicago Transit Authority is continuing its search for high-speed high-performance equipment. Since 1953 it has tested electrical components that can cut schedule times. Now it is about ready to start experimental work on four special high-speed trucks.

Two four-car test trains operating on high-speed runs in Congress Street will go into operation this fall. They will be used in limited-stop service during both morning and evening rush hours. Four of the eight cars will be part of the 50 new cars recently delivered by the St. Louis Car Company. These four cars have been equipped with the special test trucks, each with a different design. They have control cabs at both ends and can be operated as single cars.

The other four cars are CTA's 6000 Class PCC rapid transit cars equipped with B-4 trucks (B-2, B-3, and B-4 trucks are all PCC street car types used under CTA's cars). These cars are of the single-cab design permanently coupled into two-car units. In 1955 these four cars were equipped with experimental high-performance motors and controls.

Two of the cars, Nos. 6127 and 6128, were equipped with Westinghouse controls having series-parallel motor connections. These replaced the parallel arrangement used on CTA's other lightweight cars which are similar to PCC street cars. The accelerator was an entirely new design with resistance contacts in a straight, instead of a circular, arrangement. The motors had the same outside dimensions and were mounted in the trucks the same way as the standard 55-hp PCC motor but were rated at 100 hp. They were designed for operation with 28-in. wheels, a 43:7 gear ratio, and were installed in B-4 trucks. The cars were also equipped with ASF disc brakes.

Similar Characteristics

At the same time, cars 6129 and 6130 were equipped with General Electric motors and controls, similar in characteristics to the equipment on the other two experimental cars. The 100-hp motors were operated in series-parallel to get the extended high rate of acceleration and higher top speed. The motors were also mounted in B-4 trucks, with 28-in. wheels and 43:7 gear ratio.

GE and Westinghouse cooperated in their control design so the two types of equipment would be compatible in performance. An automatic interlock permitted use of these high-speed cars in a train with standard cars. When coupled to standard cars, the experimental cars can operate only in series at a top speed of about 50 mph. In trains of all high-speed cars, the control can change connections to series parallel with shunted fields with a top speed of about 75 mph. The maximum accelerating rate is set at approximately 3 mph per sec. Due to the series-parallel control this acceleration is maintained up to 30 mph, instead of 15 mph attained by standard cars having only parallel controls and standard motors.

Numerous tests were made of the four cars and a top speed of 76 mph was obtained in long non-stop runs. The cars also were operated on a parallel track for comparison with trains in regular service. The ability of the high-

speed high-performance cars to make a higher schedule speed, even in frequent stop service, was demonstrated in these comparison runs.

Since there was no place in CTA schedules where the full potential of this equipment could be utilized, the cars were operated in regular service with standard cars to get experience with the new equipment. Four years of testing has worked most of the "bugs" out of the electrical equipment which has been applied to the new test cars.

The new four double-cab single-unit cars with the special trucks are numbered one to four. The cars have distinctive color schemes inside and out, featuring two-tone seat upholstery and mottled floor covering. Cars 1 and 2 are equipped with GE motors and controls, while cars 3 and 4 have Westinghouse Electric equipment.

Cooperative Design

Car No. 1 has B-20 trucks designed cooperatively by Transit Research Corp., GE, St. Louis Car Co., and the CTA. The design is basically similar to the B-3 truck, which has given good results under the standard speed cars, but it was designed for high-speed operation and to test other ideas in springing, bolster snubbing and motor mounting.

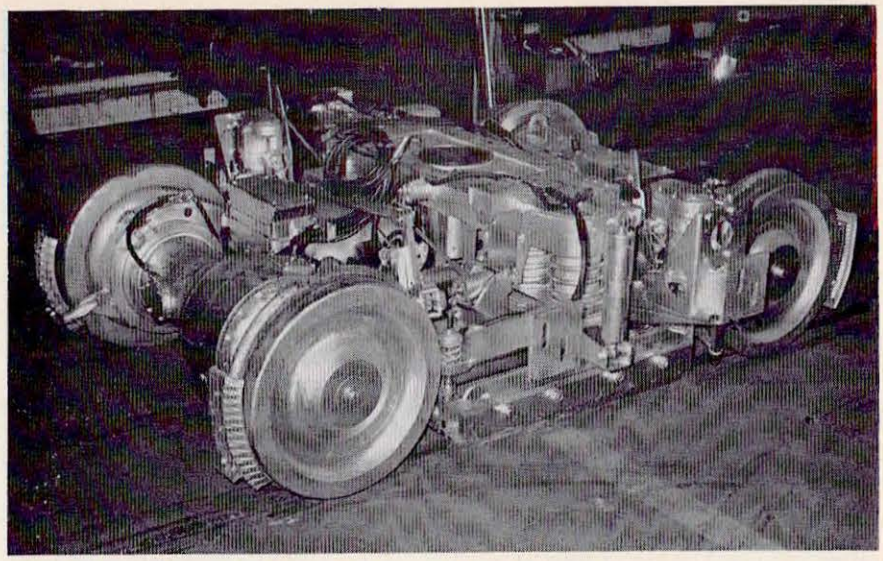
The B-20 truck has independent side frame held together by the axle housings, which also serve to hold the truck in tram. The housed axles and gears, designed and built by General Electric, feature a unique gear arrangement wherein the gear is carried on a quill instead of the axle shaft. The drive between the quill and axle is through rubber.

The B-20 trucks have ASF disc brakes mounted on the pinion shaft of the axle unit instead of on the motor armature shaft. Drive is through Spicer universal joint drive shafts. Journals and pinion bearings were furnished by Timken. In addition, the trucks carry the CTA standard current collector beams with sleet scrapers, track brakes, Westinghouse disc brake actuator, and mud guards.

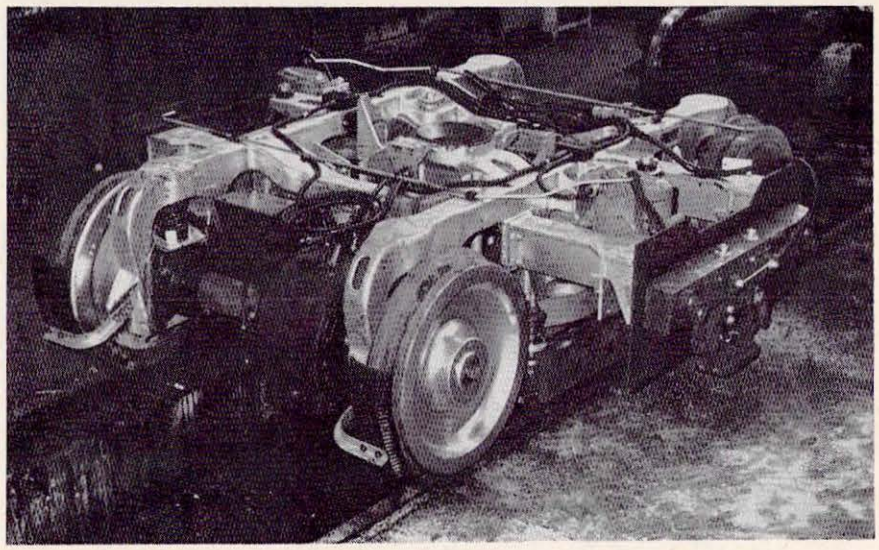
St. Louis Car did the detail design and assembly, with fabrication almost entirely by welding. The weights of the B-20 trucks are 11,888 lb and 11,262 lb. The difference is accounted for by the fact that one truck does not have sleet scrapers.

Car No. 2 had General Steel Castings trucks. They follow the same design as those built for Cleveland, but with provisions for attaching such things as CTA's standard current collector beams, track brakes, and disc brake actuators. The frame is a one-piece alloy steel casting. The bolster

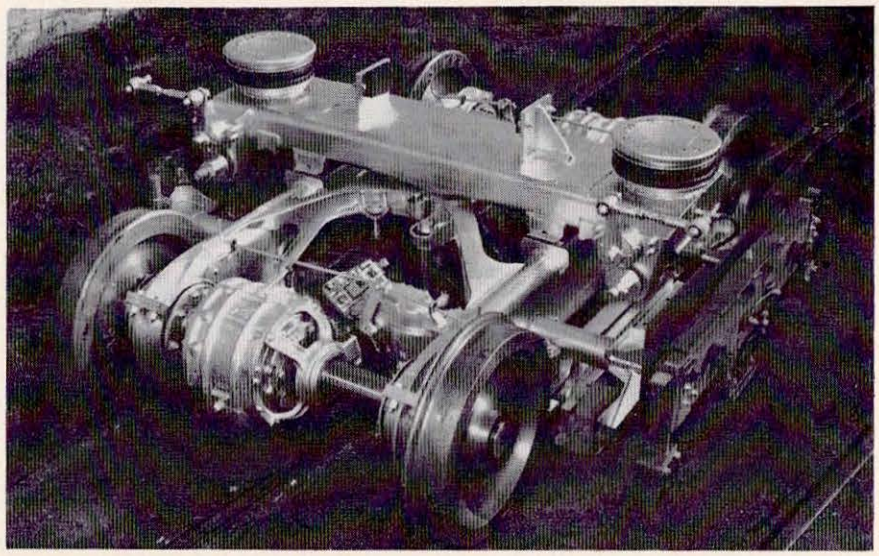
(Continued on following page)



THE B-20 TRUCK is designed to test ideas in springing, bolster snubbing and motor mounting. Gear is carried on a quill instead of axle shaft.



PIRELLI SPRINGS with the coils encased in rubber carry the bolster on the GSCC truck with a one-piece cast alloy steel frame.



BUDD TRUCK, similar to Pioneer III trucks, is new design with independent side frames which clamp, through rubber, the journal boxes.

SINCE 1955, 6000-Class cars tested new General Electric and Westinghouse motors and controls.

CHICAGO TESTS NEW-TYPE TRUCKS *(Continued from preceding page)*

is carried on single coil Pirelli springs which have the coil entirely encased in rubber.

The trucks have open axles with SKF journal boxes in pedestals and GE gear units. The motors are carried on the truck transom members, which are part of the one-piece frame casting. ASF disc brakes are mounted on the motor shafts. Drive to the gear unit is through Spicer universal joint drive shafts. Light weight equalizer bars were added to the truck to provide unsprung supports for the track brakes.

The GSCC trucks weigh less than the B-20 trucks. The No. 1 truck, having the large current collector beams and sleet scrapers, weighs 11,526 lb. The No. 2 truck, without sleet scrapers, weighs 11,266 lb.

New Fabricated Truck

Car No. 3 has Pioneer III trucks designed and built by the Budd Co. This is a new design of fabricated truck with independent side frames which clamp through rubber around the Timken journal bearing boxes on an open axle.

To relieve the journal bearings and axles from maintaining the tram of the truck, a bracket is attached to each side frame, each terminating in half of a circular ring. The two half circles fit loosely about a center post against which they bear when resisting forces which tend to untram the truck. This post carries none of the car weight but otherwise provides the functions of a center plate.

A small air compressor and reservoir installed on the car body supplies air for the air springs between the car body and the bolster. Leveling valves adjust the pressure to keep carbody height uniform under varying passenger loads.

The motors are "close-coupled" to the Dana drive gear boxes on the open axles. No drive shafts are used. The drive end of the motor frame is bolted rigidly to the gear box through an intermediate housing that encloses the ASF disc brake.

The motor shaft and pinion shaft of the gear box are connected by a flexible coupling instead of a universal joint drive shaft.

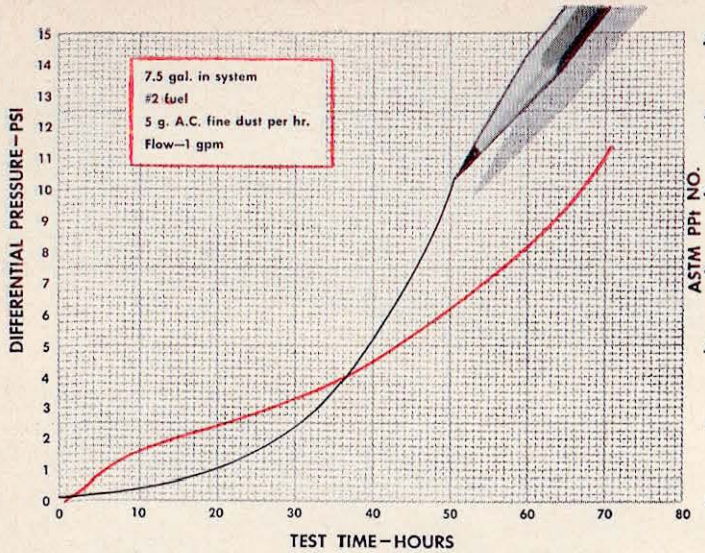
The truck wheel base is 6 ft 10 in., 4 in. longer than the B-20 and GSCC trucks, to provide room for brush removal on the close coupled motors.

Car. No. 4 has B-30 trucks, another cooperative design by Transit Research, Westinghouse Electric, St. Louis Car, Dana Corp., and CTA. This fabricated truck adapts the successful B-3 truck to use an open instead of a housed axle to eliminate three bearings in line, a bad feature of the B-2 and B-3 housed axle designs. The open axle requires some other means than the axle housing to hold the truck in tram. This is accomplished by two transoms connecting the side frames.

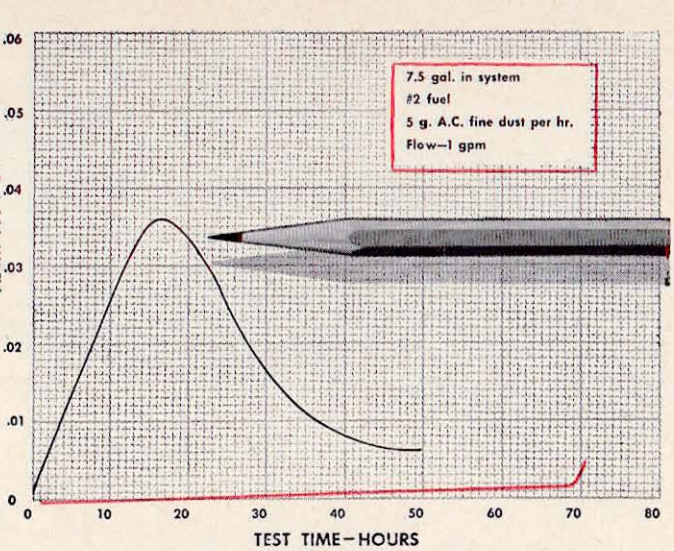
Clamped Through Rubber

In the B-30 truck, the side frames are clamped through rubber to all four journal boxes in the same general way as in the Budd truck. Hyatt journal bearing boxes will be tested. The open axles will be fitted with Dana Drive gear boxes and "close-coupled" Westinghouse motors like the units used on the Budd trucks. ASF disc brakes will be between the motors and gear boxes, permitting a short pull rod to be used in connecting the Westinghouse air brake actuators attached to the inside of the side frames.

The free ends of the motors are hung on anchor rod type hangers from the transoms, as on the Budd trucks. The standard wheel base was increased from 6½ ft to 6 ft 10 in. to provide access to the brushes. The motor mounting places ends of the motors so close that there is insufficient space for the standard PCC king pin, as used on the B-20 and GSCC trucks. Therefore, the B-30 truck bolster is designed to use a conventional shallow center plate and roller side bearings.



Showing comparative flow rate of Conventional Cotton (black line) and New WIX P-1 Porosite (red line) Second Stage Fuel Filters. With 10 psi the condemnation peak, note that the old style cartridge has a service life 16 hours less than that of the New WIX P-1 Cartridge.



This chart exposes the comparison of oil filtration efficiency. Note the unfavorable peak registered by the Standard depth-type Filtrant. Also note that the oil filtered by the WIX P-1 Filtrant never showed more than trace amounts of contamination over its longer life.

New Developments in Diesel Fuel Filtration Promise Improved Performance PLUS Economy

Shown above is the WIX Filter Prescription for trouble-free Diesel Fuel. At the left — WIXITE Primary Fuel Filter Cartridge. At the right — the New WIX P-1 Pleated Paper Second Stage Fuel Filter Cartridge whose outstanding performance is shown in the charts above.

Diesel Fuel Filtration is a vital cost factor. Over $37,000,000 is the figure set as the avoidable annual cost of dirt in Railroad Diesel engines in 1956. That is the cost in wear and repair alone. It doesn't take into account the additional costs such as: down time of units; delays, disruption of schedules and related losses due to mechanical failures.

WIX Prescription Filtration is a positive, practical answer to this staggering cost factor. WIX research has developed Filter Cartridges for Primary and Second Stage Fuel Filtration that, combined, provide revolutionary results for many Railroads. WIX also offers dramatic new filtering efficiency for Diesel Lubrication. These advances are important to you . . . write for particulars today.

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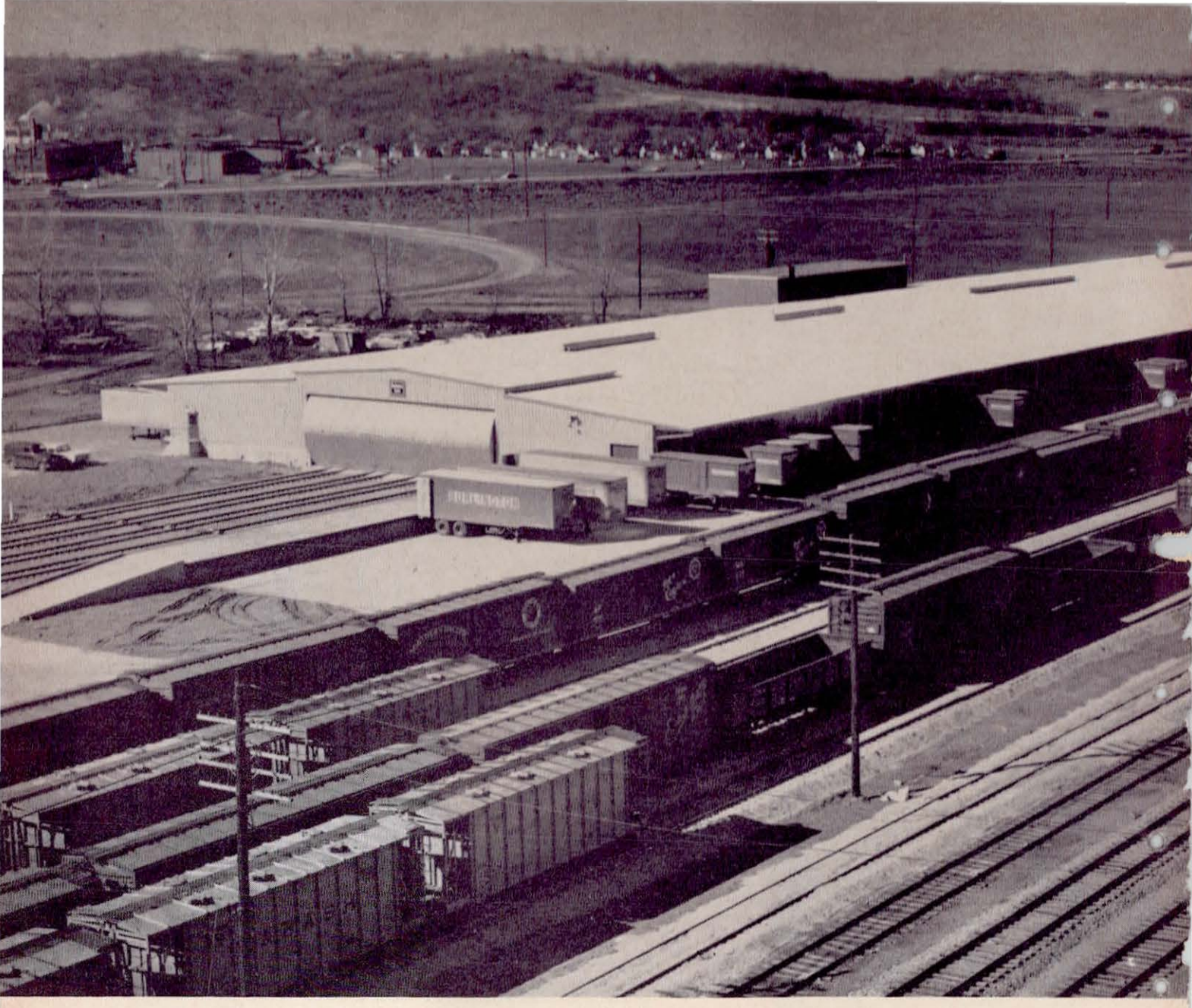


NEW FACILITY has four tracks through it. Doors at track of ferings are motor-operated rocker type.

New Burlington Freighthouse to

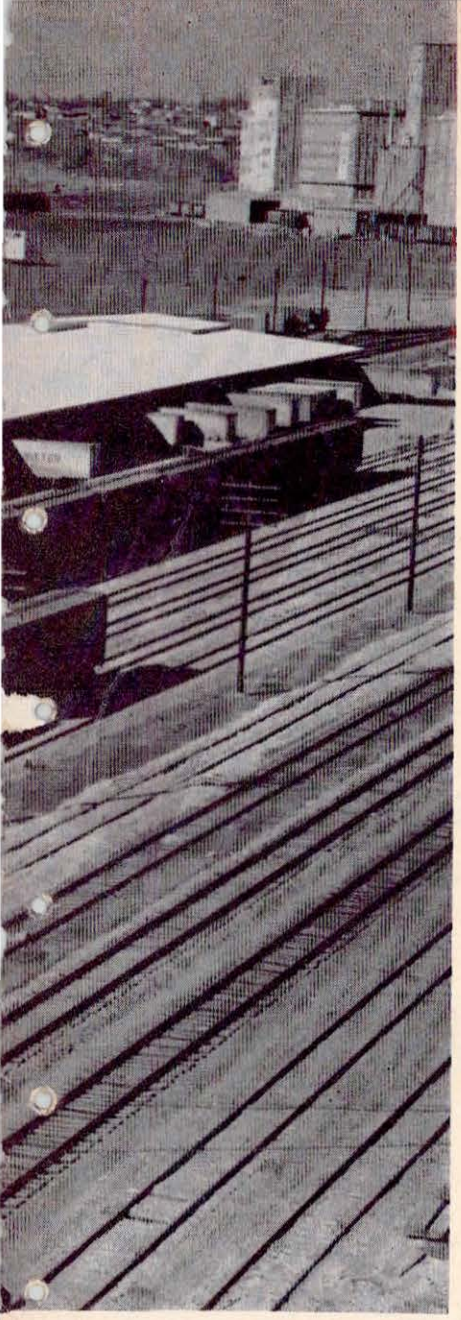
► **The Story at a Glance: A new LCL freighthouse on the Burlington at North Kansas City isn't the largest this road has built in recent years but it has practically all the modern features boasted by its earlier counterparts. Among them are prefabricated construction, and a retractable bridge spanning the tracks between platforms. It has, in addition, some features not found in the larger facilities, including unbroken roof lines in the warehouse, and prestressed, precast concrete floor slaps in the office building.**

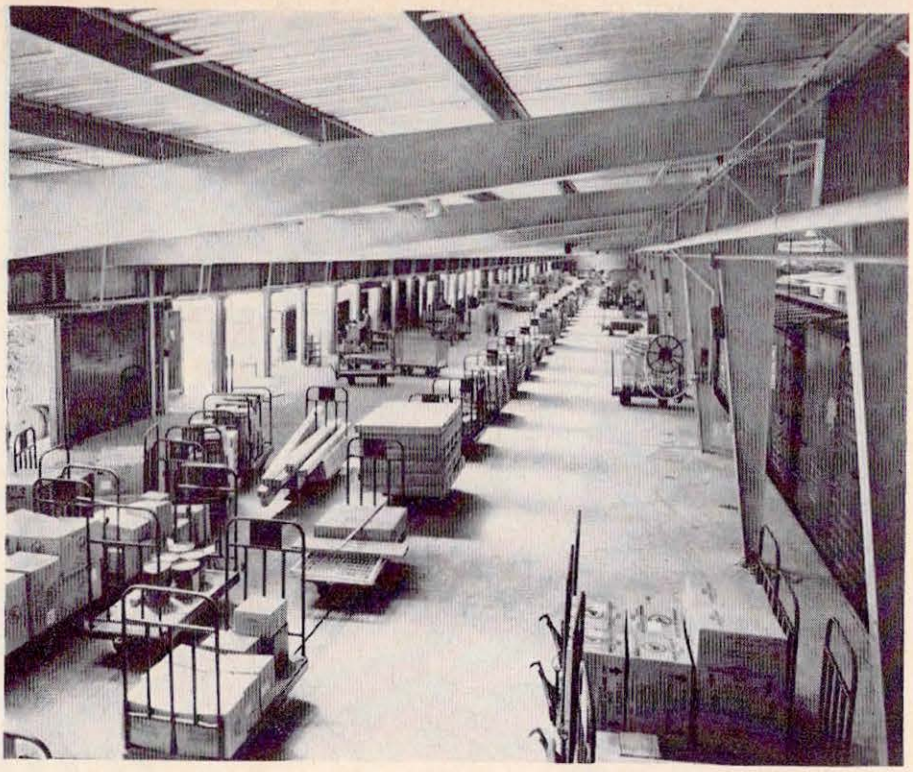
In recent years the Chicago, Burlington & Quincy has built several LCL freighthouses in the Chicago area that incorporate advanced features of design and construction for such facilities. It has now completed a new structure of this type at North Kansas City which, while somewhat smaller than its earlier counterparts, is in some respects even more advanced.

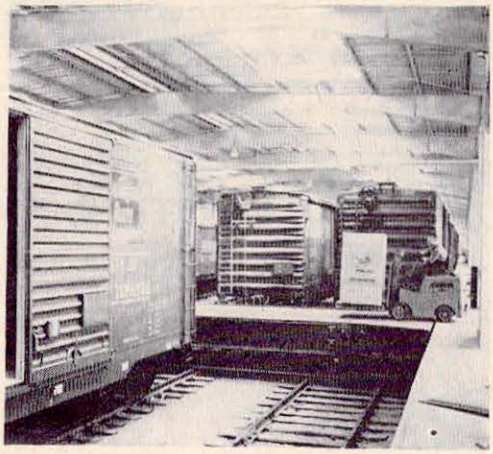
The new facility, built at a cost of $1,750,000, is on a 21-acre site near the road's freight yard and immediately north of the 400-acre Paseo Bridge Industrial District now under development by the Burlington. Serving both the railroad and its wholly owned subsidiary, Burlington Truck Lines, Inc., it replaces a smaller multi-story freighthouse in Kansas City proper.

Designed to expedite the transfer of merchandise between railroad cars and highway trailers, the freighthouse is expected to result in a substantial reduction in terminal handling time for LCL freight, according to G. R. Glover, traffic vice president of the Burlington.

Like its predecessors at Chicago, the







UNDERFLOOR towing circuit serves both platforms. At ends of building it descends to track level on ramps and crosses tracks at grade.

RETRACTABLE bridge spans tracks between platforms. Note rigid-frame construction of building over tracks and illumination afforded by translucent panels in roof.

Cut LCL Terminal Handling Time

new facility is of prefabricated metal construction. The freighthouse proper consists of a single building covering two concrete platforms separated by four tracks that extend through the structure. It is 709 ft long and 148 ft wide, not including a 10-ft canopy overhanging the tailboard space on each side. The platforms are 50 ft wide, and the tracks can hold a maximum of 60 cars.

Features the freighthouse has in common with those at Chicago include a retractable bridge which spans the tracks midway of the building, an overhead aluminum rocker door at each end that opens or closes in 30 seconds to allow cars to be switched into or out of the building, and an underfloor drag chain circuit which serves both platforms. Both the bridge and the rocker doors are operated electrically by pushbuttons. At the ends of the platforms the circuit is carried down to the track level on ramps and crosses the tracks at grade. Platform areas are lighted by 128 mercury vapor lamps. A paging system using talk-back speakers covers the entire building.

The main building, furnished by the Butler Manufacturing Company, consists of a rigid-frame center bay, 58 ft 7 in. wide, spanning the tracks, and side bays, 43 ft 10 in. wide, of simple beam construction. The main members are fashioned from sheet metal. They have welded connections, except that the purlins, which are of high-tensile steel and have a Z-shape section, are bolted to the roof beams.

The particular type of construction

(*Continued on page 30*)

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■ Even when they're hot, metal brake shoes provide dependable, predictable braking. In severe service, resistance to heat fade is an outstanding advantage.

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1 Chilled, recessed ends. Greatly extend shoe life . . . permit new shoes to conform accurately to wheel contour.

2 Duplane back. An American Brake Shoe exclusive. High strength for roughest service. "Puts a center sill" in the shoe. Has practically eliminated broken brake shoes.

3 Expanded metal bundle. Combines the best braking characteristics of mild steel and special cast iron. Reinforces basic brake shoe structure. Lengthens shoe life.

4 Clinched lug strap. When teamed with Brake Shoe Lockey, reduces brake head wear and breakage from vibration. Big posts give greater bearing area, reduce brake head wear. Clinched strap results in higher safety factor.

5 Ferrous materials developed by metallurgical research specifically for brake shoe service. Combine long life, desirable friction, freedom from wheel-damaging characteristics.

6 Quality throughout! —one of the big reasons why our brake shoes have become the standard of braking performance on American railroads.

OFFICE BUILDING on one side of freighthouse has prestressed, precast concrete floor and roof slabs. The double-T-design sections are made of Haydite concrete for light weight. The slabs, after installation, were covered with a 2-in. concrete topping.

OFFICE SPACE in the two-story brick and concrete building has diagonal fluorescent lighting fixtures, acoustical ceilings, movable metal partitions. The arrangement, it is said, gives better distribution of light with less shadow.

NEW BURLINGTON FREIGHTHOUSE *(Continued from page 25)*

used made possible one of the special features of the building—a continuous uninterrupted roof slope on a pitch of 1 in 12 from the center ridge to the eaves. The uniform expanse of the roof slopes is broken only at each end of the structure where it was necessary to provide a raised section to accommodate the rocker door. The raised sections are about 20 in. above the surrounding roof level and are, in effect, shallow clerestories.

Areas of the side and end walls not occupied by door openings are covered with galvanized steel sheets. The roof, on the other hand, consists of ribbed aluminum sheets. For daylight illumination skylights of translucent sheets are incorporated in the roof. There are two lines of these panels on each side of the gable, one over the track area and one over the platform.

A total of 116 truck spots is provided along the tailboard sides of the buildings. Door openings at these locations are fitted with wood overhead doors.

A two-story building on the north side of the freighthouse accommodates space for the office staff, a warm room and a cooper shop on the first floor, and locker, toilet and lunch rooms on the second floor.

The second floor also contains an office for the assistant agent and one for special agents.

Of brick and concrete construction, the office building also has some unusual features, explains C. J. Bonnevier, the Burlington's engineer of buildings. One is the use of precast, prestressed concrete roof and floor slabs. The sections, of the double T design, are made of Haydite concrete for light weight. After installation, these slabs were covered with a 2-in. concrete topping.

Features of the office space include acoustical ceilings, fluorescent lighting and movable metal partitions. The lighting fixtures, of the louver type, are attached to the ceiling diagonally with the walls of the room. This arrangement gives better distribution of light with less shadow, points out Mr. Bonnevier.

Rules—Not Workers—Are Target

From the day AAR President D. P. Loomis initiated the work rules case more than a year ago, there has been talk of "slandering the employees" and charges that management is conducting a "vicious smear" against its work force.

Does the record actually support such charges? The following 10 quotes are samples of what railroad executives have actually said or written since the case began.

► "Now, I want to make one point crystal clear. I am not attacking railroad labor. There is no more able or conscientious work force in any industry in the nation. I am, however, attacking and condemning the deadly rules our workers must work by . . . rules which limit their creative ability and their output and detract from their dignity . . . rules which are thoroughly un-American in concept and economically destructive in practice."—*Daniel P. Loomis, President, AAR, at St. Louis, Mo., Feb. 11, 1959.*

► ". . . I emphasize that the fight against featherbedding need *not* be a clash between management and labor. It *should* not be that. Railroad employees have just as much at stake as anyone else in ending cost-inflating, job-destroying work practices. Our fight is against these practices, *not* against the people entrapped and victimized by them."—*P. M. Shoemaker, President, DL&W, at Washington, D.C., April 28, 1959.*

► "Again, I want to make the point that I am not attacking railroad labor. I am attacking the outmoded work practices—NOT the approximately one-fourth of our total industry work force trapped by such rules."—*David I. Mackie, Chairman, ERPC, at Pittsburgh, Pa., May 12, 1959.*

► "The effort to end featherbedding is capriciously twisted by labor in public pronouncements as a drive against rail workers themselves. This can only be viewed as a low blow, delivered with disdainful disregard of emphatic statements to the contrary. At the very outset railroad management spokesmen emphasized that the anti-featherbedding effort is directed NOT against railroadmen or people, but against the time-worn PRACTICES and rules that threaten to destroy all jobs unless changed. To the extent such purposeful distortion wins acceptance, labor leaders must bear the blame for a callous and unprecedented blow to worker morale."—*J. Handly Wright, Vice President, Public Relations, AAR at Savannah, Ga., July 17, 1959.*

► "We are not blaming anyone for the evolution that has taken place nor is it our purpose to carry on an attack upon anyone or any group—certainly not upon our faithful and efficient Santa Fe employees who we are proud to say are doing what we think is an excellent job under the rules of the game."—*Ernest S. Marsh, President, AT&SF, at Los Angeles, Calif., Nov. 4, 1959.*

► "Our employees are the finest group of people to be found anywhere. We are proud of them. *We are not attacking our employees.* Our complaint is not with the men who run the railroads but with the antiquated and outmoded work rules which, in reality, threaten the security and prosperity of railroad employees. We are sincere in that belief."—*James W. Oram, vice president, public and employee relations, PRR at Pittsburgh, Pa., Nov. 19, 1959.*

► "Unfortunately the operating unions view our proposals as an attack on our employees and an attempt to destroy unions. This is not true. We respect our employees highly; and, of course, we intend to keep on doing business with unions as we have since the turn of the century."—*A. J. Greenough, President, PRR at Philadelphia, Pa., Jan. 22, 1960.*

► "We have no quarrel with our individual employees. How could you hold a faithful employee with 25 years' service responsible for rules written 40 years ago?"—*G. Allen MacNamara, President, Soo Line at Minneapolis, Minn., Jan. 22, 1960.*

► "At this point I should like to emphasize that the railroads do not concede that any industry has any finer, any more capable, any more loyal employees, than the employees on the railroads. They know that these men and women are assets to the hundreds of communities throughout the nation in which they live."—*Clair M. Roddewig, President, AWR at Sheboygan, Wis., Jan. 26, 1960.*

► "In public statements, management has stressed over and over again that our argument is with the *rules*, not with the men and women working for the railroads."—*D. J. Russell, president, SP in the SP Bulletin, January-February 1960.*

RULES TALKS FACE NEW DELAY

(Continued from page 9)

package for the non-ops, the SUNA board narrowed the scope of its inquiry to an investigation of the union's bid for a special "inequity" increase in addition to the pattern. The eventual findings and recommendation: "On the evidence presented in this case, and in the context of the current wage movement as it has unfolded to date, the organization's demand for an 'inequity' increase at this time is not justified, and should be withdrawn . . . Whatever may be the situation in the future, the organization should settle this year for the industry pattern."

SUNA had contended that application of the dual basis of pay has created an inequity between yard ground service employees and through freight and road passenger service employees; and further, that over the years the non-ops have fared relatively better than yard ground service workers, who should thus be entitled to a pattern-plus increase as a skill differential.

Talks between the Switchmen and the western carriers conference committee are scheduled to resume in Chicago July 18—and SUNA is expected to renew its "inequity" increase demand.

Activity in the non-ops case was suspended last week, but full negotiating committees are slated to meet again July 20. Unlike the relatively clear pattern—2% July 1, 2% next March 1—established in the operating crafts' agreements, the non-op recommendations involve a July 1 wage increase plus a series of fringe benefit proposals which must be settled by negotiation. The non-ops are dissatisfied with the recommendations.

Editors Afield

Bands played and bunting waved in a fresh breeze the other morning when Philadelphia began operating the first of its new transit cars (RA, July 4, p. 20). Some 300 guests turned out to celebrate the inaugural run of what will be an eventual fleet of 270 stainless steel cars for the Market-Frankford subway-elevated line of the Philadelphia Transportation Company. On hand for Railway Age was Associate Editor Rod Craib. Here are his notes on the event.

Reported to PTC's Bridge Street yard at 9:45 a.m. as scheduled in press invitation. Had a look at car being unloaded from flatbed trailer. Because Market-Frankford line is trolley gage (5 ft, 2¼ in.) all cars being delivered over city streets from Budd's Red Lion plant at the other side of the city. Unloading went smoothly.

Press conference in car 619 of train scheduled for ceremonial run. PTC Vice President George Smith noted original Market-Frankford cars to be replaced were 53 years old, had turned in 500,000,000 car miles. City Transit Operations Engineer E. L. Tennyson said cars were bought by the city through a $25,000,000 bond issue, but no burden on city taxpayers, since all carrying charges on bonds, including interest and principal payments, will be paid by PTC out of transit revenues. L. Reynolds of Budd Co. began explaining construction details. "Ventilators," he said, "are thermostatically controlled." Ventilators obligingly went on. Hard to hear Mr. Reynolds but cars nice and cool.

Train moves to Bridge St. terminal loading platform at 10:30 on schedule. Police and fire department band plays "Swanee River." City officials and other guests invited for inaugural ride begin to appear.

PTC flat car is spotted on track ahead of No. 619. Begins to fill up with TV cameramen and press. Newsmen begin interviewing guests as they arrive. Consensus: a new age in public transportation.

During one-hour wait scheduled at Bridge Street platform, what appears to be a good percentage of the quarter-million daily Market-Frankford riders board trains departing other platforms. Their consensus not officially determined, but general sentiment seems favorable.

Mayor Richardson Dilworth arrives 11:10, on schedule. Handshaking all around. Mayor Dilworth joined by PTC President Douglas M. Pratt and Budd Co. President Edward G. Budd, Jr. Leather motorman's hat produced for Mayor Dilworth.

Mayor Dilworth, Mr. Pratt, Mr. Budd and senior PTC motorman Harold Diebler pose in front windows of train for pictures from flat car. All smiling. Band plays Sousa march.

Flat car run back to yards at 11:20. Band plays "Maryland, My Maryland." Pictures made of mayor standing up, of mayor sitting down, of mayor holding grab bar for standees.

Train of old equipment departs from other platform at 11:28. Inaugural train to be next out. Doors close 11:34. Band plays Sousa again.

Inaugural run begins at 11:35. Band plays; crowd waves; inaugural guests wave back.

Train rides very smoothly. Acceleration smooth and rapid; so is braking. Ventilators' noise hardly noticeable with train in motion. General noise level low.

Inaugural train, draped with flags, runs through stations without stopping.

Stop at intermediate terminal, but doors stay closed. Superior acceleration of inaugural train has let it catch up with earlier train; must now wait to clear signals.

Inaugural run ends at City Hall Station, 12 noon, on schedule. All debark. Train picks up waiting passengers and goes into revenue service. Consensus: new cars off to a good start.

Letters from Readers

'Wailing Wall'?

Wynnewood, Pa.

To the Editor:

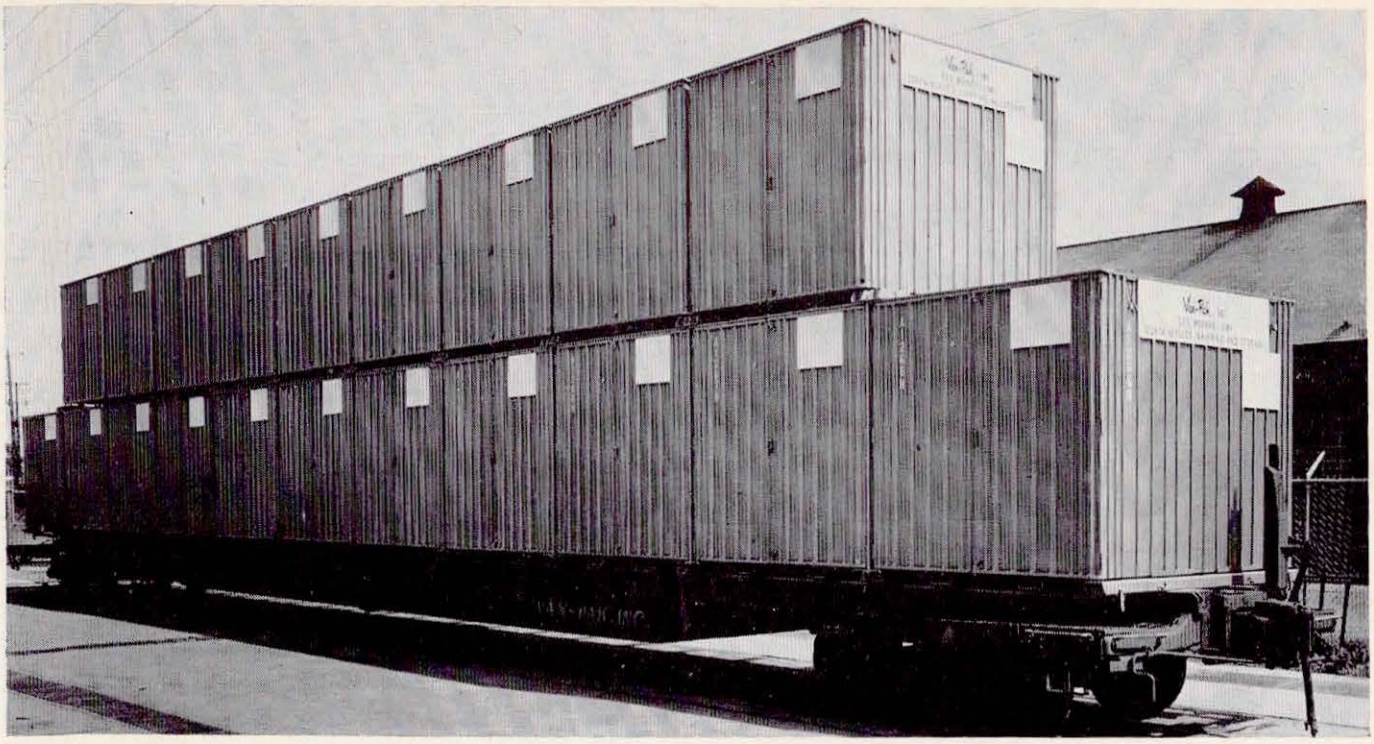
Dr. [Walter] Kramer in "Special Report: A Professor Visits Railroad Management" (RA, July 4, p. 26) states that railroads have over-told the "deteriorating railroad" situation and other "wailing wall" propaganda programs. It is a fact nevertheless that the overall economic situation of the roads is bad despite a few bright spots where long-hauls, specific commodities, little or no passenger service, or all three, bail out certain railroads such as the Santa Fe, Union Pacific, C&O, N&W and a few others. It has been said many times that the railroads were remiss in stating their case, and public relations experts were hired in recent years to plug this gap; and now that they are getting some publicity for tax inequities, subsidies to competing forms of transportation, archaic work rules the like of which no other business has to contend with, they are accused by Dr. Kramer of "wailing wall" tactics. Since when has it been wrong in America to state one's grievances again and again providing they are real grievances, in the hope that the logic of the case will eventually reach ears that can do something about it? It does not speak well for the broad-mindedness, or sportsmanship, of Dr. Kramer's colleagues when they refer to the program of the Economic Education Fellowship as a proselytizing program, particularly so with a railroad.

It comes as something of a surprise that students in our colleges and universities, including those about to enter, are "anti-railroad." I seriously question whether this is so but if there is a modicum of truth in the statement one wonders why. This group of citizens knows nothing about the era of Gould-Fiske-Depew and if the older college professors have some knowledge of those "public-be-damned" times they could set the students straight in short order by explaining that under the ICC and the SEC such things cannot happen today.

It is unrealistic in the face of the evidence for Dr. Kramer to conclude that the railroads' present situation is due to technological obsolescence, management stupidity, and greed unless he is prepared to back it up. It does not seem to me that diesel locomotives, centralized traffic control, pushbutton yards, air-conditioned passenger cars, radio communication, roller bearings, mechanical track working tools, to mention only a few, are evidences of technological obsolescence or stupidity, yet practically all railroads have invested millions of dollars in them. . .

Dr. Kramer's report reminds me of a story that went the rounds in Delaware several years ago when the duPonts built a fine new public school. At the dedication ceremonies someone booed at the mention of the duPont name. A man turned to Pierre S. duPont and asked if that did not discourage him from building schools. He replied, "No, it tells me I should build more of them."

C. K. Steins



CONVERTED 80-ft. General American Clejan-type car handles 20 containers, each holding a ton of household goods.

TOFC Tackles Household Goods

Piggyback and bi- and tri-level flat cars have brought a large chunk of the new-automobile business back to the rails—and developers of a new flat car containerization rig see similar promise for rail movement of household goods.

The Champion Company, Springfield (Ohio) container manufacturer, has designed a conversion of the Clejan-type flat car which permits loading of 20 containers in two tiers. First operation of the car involved a shipment of military household goods which moved from Washington, D. C., to Richmond, Calif., between July 1 and 5 on a Baltimore & Ohio-Santa Fe routing.

Containers used in the initial move measure 94 x 84 x 82 in. Overall height of the car and load is 17 ft, 5 in., but Champion is developing a design modification which will cut the height and bring the car within limits of all eastern-road clearances.

The mounting device for the bottom tier of 11 containers uses 12 cross-members, positioned on the center sill by lugs and tied together by two rods running the length of the car. Cross-members are slotted to receive hold-down devices on the containers. Top-deck containers are tied down to similar cross-members, which are joined to the bottom cross-members by vertically-mounted rods. The device makes use of the Clejan car's shock absorption system to provide load cushioning. Impact tests, according to Champion Vice President Joe C. Mills, produced a reading of 2G's on an 8-mph impact, for "approximately a 75% reduction in shock load."

CROSS-MEMBERS, positioned on center sill by lugs and tied together by longitudinal rods, are slotted to receive mounting brackets on containers. Twelve cross-members accommodate eleven containers on bottom tier.

Costs chargeable to multiple handling, delay in transit, loss, damage and pilferage are reduced, the company points out, and "conversion of the General American car for two tiers of containers will result in even greater savings."

Champion converted the car for Van-Pak, Inc., of Des Moines, Iowa.

Railroading After Hours with Jim Lyne

'SODA ASH JOHNNY'—Somebody was asking me the other day about "Soda Ash Johnny" Horan—credited with being the first railroadman to use soda ash in the treatment of boiler water and who was still railroading on his 100th birthday. To refresh my hazy recollection, I turned to Larry Gillick of Vapor Heating—scion of a famed Milwaukee Railroad family. Larry lent me quite a file—which he borrowed from the Milwaukee's Frank Bunce.

"Soda Ash Johnny" died in 1938 at the age of 100 years and 12 days—and with a record of almost 83 years' continuous service with the Milwaukee and its predecessor companies. He started railroading in 1855 and was general foreman at Yankton, S. D., when he developed his system of water treatment, and thereafter spent the rest of his career in controlling boiler feedwater conditions. He lived to see a son, a locomotive engineer, put in 50 years' service with the Milwaukee.

If anybody ever railroaded longer or lived longer at railroading than Soda Ash Johnny, I've never heard of him.

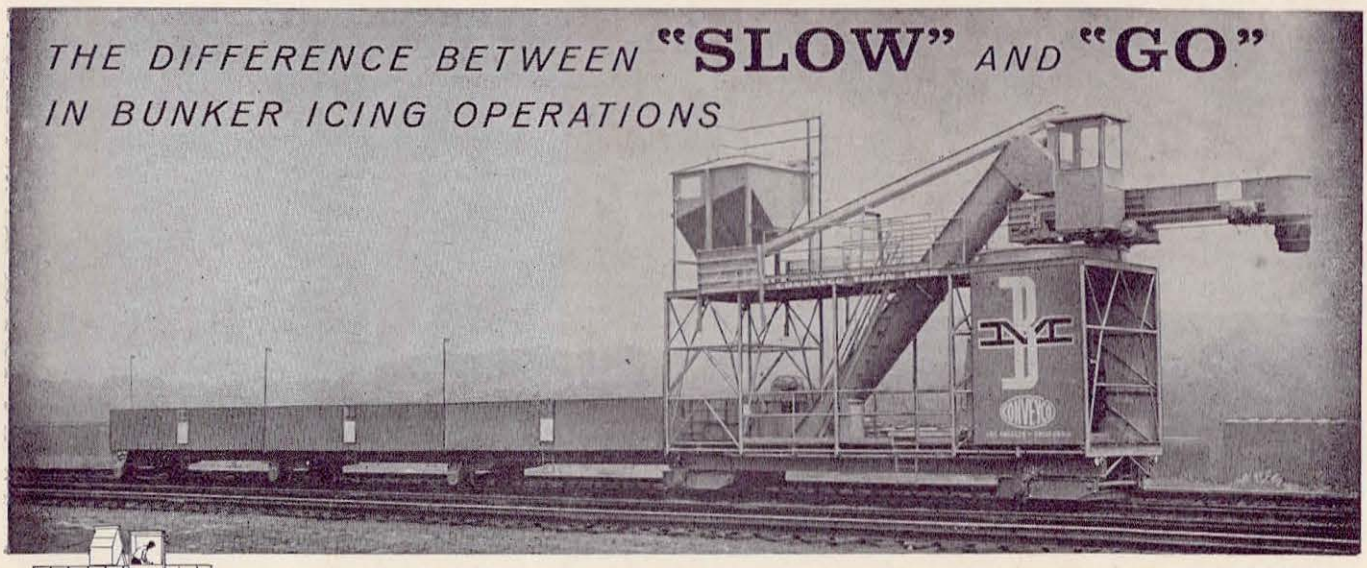
WASTING RESOURCES—The London Economist said, in its June 4 issue, that the Americans started out World War II with "no thought of a possible manpower shortage and were slow to realize that there was one."

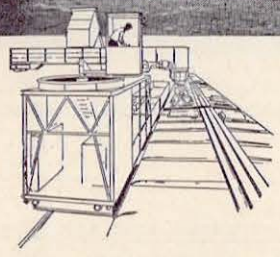
From where I sit, I'd say our top government people still do not have any conception of the necessity of economy of either people or materials in a time of military peril—else they would not be permitting their truly economical transportation (the railroads) to be supplanted to so large a degree by transportation methods that are wasteful of men, of fuel and of materials.

RUSSIA'S BOOMING RAILROADS—Joe Fountain of the Canadian National's PR department has sent me a clipping of a British newspaperman's favorable impressions of a ride on Russia's railways—not greatly different in its conclusions from our own Bob Lewis' favorable reports on the same subject.

I see our U. S. politicians are arguing with each other about whether Russia's national production is going to overtake ours, or not. With no inside information on that subject, I think it's the worst kind of folly to risk underestimating a competitor's potential. The Russians would not have to equal our production, either—in order to surpass us in military power—because so large a percentage of our productive capacity is frittered away on non-essentials.

THE DIFFERENCE BETWEEN "SLOW" AND "GO" IN BUNKER ICING OPERATIONS





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says FRANK E. CHESHIRE, Manager of Sales
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"Objective planning is more than a trend—today freight carrying rolling stock needs to be designed to a *purpose*.

"Shipper requirements, increasingly wide variety of lading characteristics, mushrooming development and adaptation of loading, stowing, and discharging methods and appurtenances, the premium on time, and overall shipping costs, all dictate purposeful design.

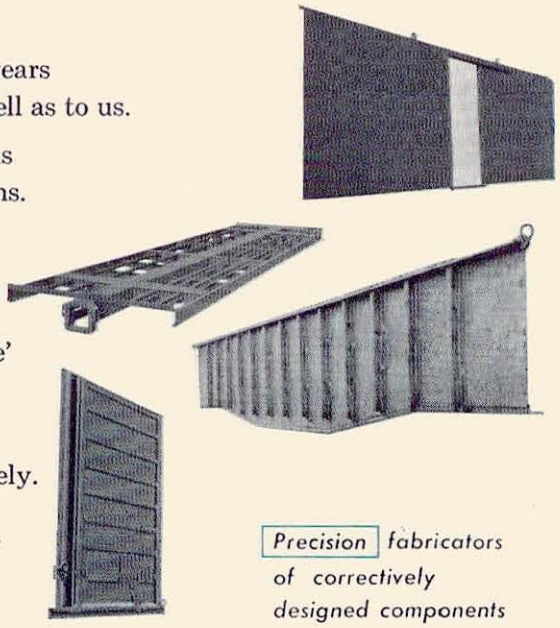
"When we started fabrication of freight car components at International Steel, our aim was to put *precision* into the design and construction of the freight car.

"Our achievements in this direction over the past ten years have been very gratifying to our customers as well as to us.

"But our aim to achieve precision in design as well as construction has led us along many paths. One of the chief elements of design (and indeed, one of the conditions for success in *any* undertaking) is definite purpose.

"An 'all-purpose' freight car is a 'no specific purpose' car for which plans are generalities. Result: limited adaptability and idle car days.

"At International Steel we plan objectively. Give us your most demanding purpose and let us put precision into its plan."



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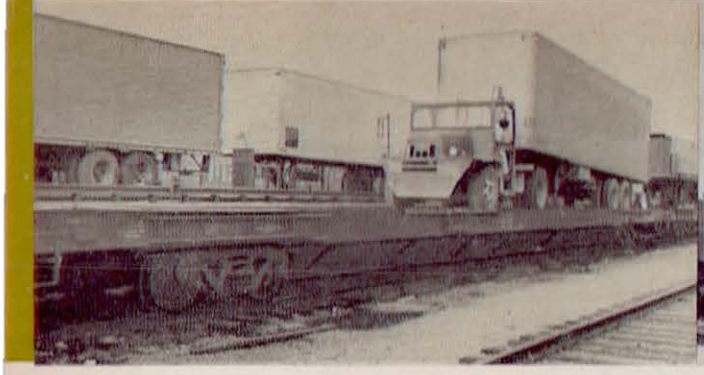
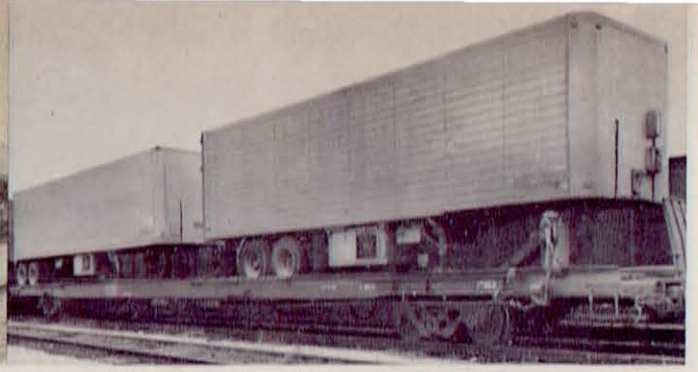


The PS-4PB Piggyback Flat Car loads and unloads so quickly and easily you'd think it was designed with the tractor driver in mind! The continuous one piece 85-foot combination rub rail and side sill makes trailer locating and positioning faster than ever before.



Two 40-foot trailers with front mounted refrigerating units have room to spare on the all steel deck of the PS-4PB. Conveniently located tie-down arrangements secure any type or size of trailer in a matter of minutes.

ANOTHER BENEFIT OF

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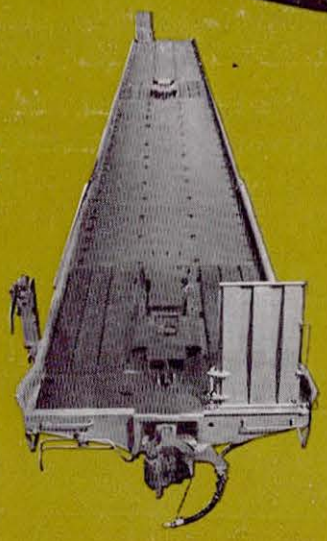
PS-4PB PIGGYBACK FLAT CAR



Trailer Train Company operated its piggyback fleet nearly 119,000,000 miles in 1959. Besides being an increase of 108% over 1958, these millions of miles have record revenue significance as more than 90% was loaded mileage. To achieve this kind of growth and performance Trailer Train has relied heavily on the in-service dependability of the Pullman-Standard PS-4PB Piggyback Flat Car. With 1650 PS-4PBs in service or on order since 1958. Trailer Train is assigning the PS-4PB an important role in plans for future expansion and achievement.

The PS-4PB is the most widely used flat car for trailers. Thirteen railroads and other users already have ordered or put into service more than 2500 of these built-to-serve flat cars.

The PS-4PB is exactingly pre-engineered and pre-tested for dependability and endurance. It can log remarkable numbers of profitable revenue miles because of its superior quality of design and manufacture. The PS-4PB features all-welded, unitized construction. The underframe and body components are welded into one unified structure providing light overall car weight without sacrificing car strength. Specify the standardized PS-4PB Piggyback Flat Car . . . it is designed and built to deliver record-setting service and economy on every piggyback trip.

THIS BOOKLET IS YOURS on request. It describes fully the easy loading and positioning as well as the design and construction features, the general dimensions, clearance and structural strength of the PS-4PB. Send now for your copy of the new "PS-4PB Piggyback Flat Car" booklet.

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The Railway Educational Bureau was organized over 50 years ago by the Union Pacific Railroad. A few years later, it became an independent organization in order to serve employees on all American Railroads. Today more than 70 American Railroads co-operate in making the Bureau's wide scope of service available to their employees. On the Bureau's Individual Service Plan, instruction, assignments and evaluation are handled entirely by mail. The low enrollment cost (less than 14¢ per day) entitles you to a very wide selection of subjects.

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1809 Capitol Avenue, Omaha 2, Nebraska

I am interested in subjects related to the railroad jobs checked below. Please send full details. I understand this inquiry will not obligate me in any way.

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- ☐ Pipefitter
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- ☐ Lineman
- ☐ Wireman
- ☐ Fireman
- ☐ Engineer
- ☐ Draftsman
- ☐ Signal Maintainer
- ☐ Engineering Dept.
- ☐ Mechanical Dept. Office
- ☐ Official, Supervisor, Foreman, Chief Clerk
- ☐ Other (please specify)

Name_____

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Brake Test Device Cuts Delay

Terminal delay and unproductive employee time charged up to air brake test requirements may not pose insoluble problems. Two members of Chesapeake & Ohio's research department, working with a device conceived and patented by a retired C&O employee, have come up with "Time-O-Test"—a compact unit designed to streamline the whole brake test operation.

Here's the problem: The current test code requires that the brake system be charged to a specific pressure, a brake pipe reduction made, a leakage test performed, a further reduction made and the entire train inspected to determine that all the brakes have applied and that piston travel is within proper limits. At this point, inspectors are usually at the rear of the train.

Next phase of the test requires that brakes be released from the front of the train and that the entire train be inspected for proper release. Various roads handle the release in various ways. An inspector may have to walk to the front of the train to effect release. A foreman (or another inspector) may release the brakes after sufficient time has passed to allow the inspectors to reach the rear of the train. Or the inspectors at the rear of the train may be required to pass a signal to the head end after the application test is completed. As C&O's researchers see it, "curved yard tracks, extreme distances, poor visibility and frequent absence of the man at the head end render these methods unreliable at best."

Here's the "Time-O-Test" answer, based on a device patented by E. E. Andrews and licensed and developed by John Burke and George Sennhauser: The inspector, by operating a single handle, can charge the train through an unrestricted port, apply and release brakes through the proper-size orifices and lap the brakes for leakage tests. A gauge shows the train line pressure in all handle positions.

Before he walks the train, he sets a self-powered clock mechanism on the device to allow sufficient time for a brake application inspection. Release automatically takes place after the inspector has reached the rear of the train and he then checks for proper release on his return walk.

Principal advantage of the device, its developers say, is its potential for streamlining yard test procedure by eliminating the delay often associated with brake release. Delay of an inspection crew can cost between three and four cents per man-minute—and "in a medium-size yard, a 'Time-O-Test' unit will pay for itself in less than a month," they point out.

The two C&O men have set up their own company, Railway Research, Inc., in Cleveland, Ohio, to produce the device. A number of roads, they say, are using it now, "with very favorable results."

CNR Diesels Get Drums To Arrest Sparks

Sparks from locomotives, a problem in the days of steam, were not entirely ended when railroads converted to diesel power. Operating officers have frequently commented on the problem, which is caused by the burning and dislodging of carbon deposits in a locomotive's exhaust passages.

Most common solution among U.S. roads has been the use of wire mesh over exhaust stacks, particularly on road units. The drawback to this is that hard carbon accumulates on the mesh, resulting in increased back pressure. Experiments with drum-type arresters have resulted in at least one commercial unit, now being marketed by a U.S. firm.

The Canadian National reports from Montreal that it, too, has been concerned with the sparking problem and the road's mechanical department has developed a drum device which is presently being installed on road and yard switchers.

The CNR drum (⅛-in. plate, welded) is applied externally to diesel exhaust stacks. Each drum imparts high-pressure action in circular motion to the exhaust gases. Any hot particles ejected into the exhaust system are separated from the gasses by centrifugal force and are retained inside the drum until they burn out and disintegrate.

CNR says the cost of equipping a yard or road switcher runs around $200. Road passenger and freight units are not involved in the CNR program. Clearance factors led to a decision to equip these units with a manufacturer's design acceptable to the carrier.

Before developing the drum-type arrester, CNR conducted extensive tests during which it found that exhaust manifolds, manifold legs and exhaust stacks were comparatively clear of carbon accumulation. The source of the trouble was found to be on surfaces nearer the initial exhaust outlet from the cylinder; carbon deposits in this area were heavier and softer.

The first solution tried was the wire mesh bolted to the exhaust stack. This was discontinued when the build up in back pressure was observed.

The road then tried a manifold-type

arrester but restricted its application to passenger and road freight units. The cost of re-working exhaust manifolds and applying this type arrester was around $1,000.

Further study led to development of the drum arrester, which uses the same cyclonic action principle as that employed in the manifold arrester. The drums, which can be applied to all three makes of switchers in use on CNR, are made in the road's regional locomotive shops.

Temperature-Controlled Meat Shipment Test Set

Two mechanical refrigerator cars and four refrigerated trailers are scheduled to leave Lincoln, Neb., July 18 in a tightly temperature-controlled test of fresh meat shipment conducted by the U.S. Department of Agriculture. The move, from Lincoln to Philadelphia, will be run over the Burlington and the Pennsylvania.

Equipment used in the test will be:

- MNX 2389, a mechanical refrigerator with Mercedes-Benz diesel and Sterling compressor and polyurethane foam insulation (RA, March 7, p. 27).
- FGE 208, a 40-ft mechanical refrigerator with a Witte engine and Carrier refrigeration system.
- Four CB&Q Trailmobile trailers on two 85-ft piggyback flats. Two trailers will have foamed-in-place insulation and Sterling units. Two will have 3-inch styrofoam and 1-inch fibre glass insulation in walls and ends, 5-inch ultralite in roof and 5-in styrofoam in floor. They'll be equipped with Thermo-King units.

A caboose containing instrumentation for the tests will be operated between the two reefers and the two piggyback flats.

Performance reports will be issued by the government agency after completion of the tests and analysis of data.

Dividends Declared

BANGOR & AROOSTOOK.—20¢, quarterly, payable Sept. 30 to holders of record Sept. 6.

CINCINNATI INTER-TERMINAL.—4% preferred, $2, semiannual, payable Aug. 1 to holders of record July 20.

MAINE CENTRAL.—5% preferred, $6.25, accumulation, payable Sept. 1 to holders of record Aug. 18.

MICHIGAN CENTRAL.—$25, semiannual, payable July 31 to holders of record July 21.

NORFOLK & WESTERN.—common, $1, quarterly, payable Sept. 9 to holders of record Aug. 11; 4% preferred, 25¢, quarterly, payable Aug. 10 to holders of record July 14.

NORTHERN CENTRAL.—$2, semiannual, paid July 15 to holders of record June 30.

NORWICH & WORCESTER.—8% preferred, $2, quarterly, paid July 1 to holders of record June 15.

PIEDMONT & NORTHERN.—$1.25, quarterly, payable July 20 to holders of record July 5.

PITTSBURGH & LAKE ERIE.—$1.50, quarterly, paid July 15 to holders of record July 5.

WESTERN PACIFIC.—25¢, quarterly, payable Aug. 15 to holders of record Aug. 1.

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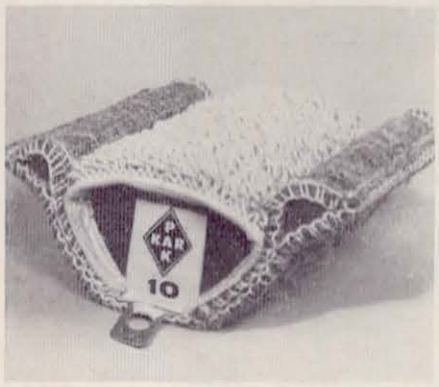
New Products Report

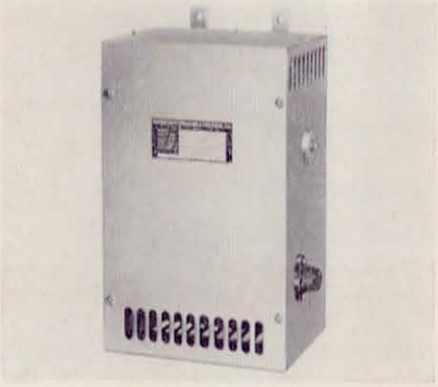


Journal Lubricator

The core of the Karpak one-use lubricator is a one-piece nitrile rubber foam with three internal helical springs held in place by non-ferrous caps. This combination is said to permit high oil retention, good baffling of oil, and permanent resiliency. The lubricator, which utilizes the chenille lock-stitch, has been submitted to the AAR Research Laboratory for test. *Miller Lubricator Company, Dept. RA, 1150-1200 East Eighth St., Winona, Minn.*

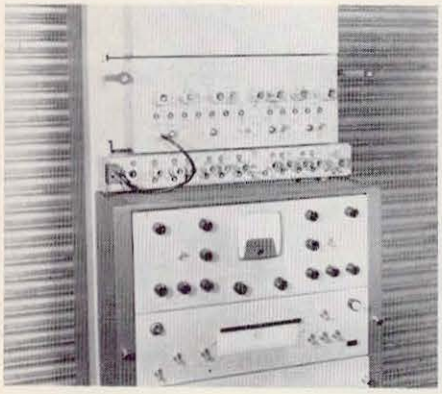
Pocket Radio Receiver

A fully transistorized VHF pocket receiver provides 500 milliwatts audio output. It is available for operation in the 25-54 and 144-174 mc bands. The 10-ounce unit operates for 12½ hours from a rechargeable nickel cadmium battery, or 125 hours from a replaceable mercury cell. The unit includes a built-in antenna and a jack for an external antenna to extend the range. *Motorola, Inc., Dept. RA, 4501 W. Augusta Blvd., Chicago 51.*



Battery Charger

A battery charger now being installed on PFE refrigerator cars will accept voltage inputs from 150 to 300 volts at 40 to 80 cycles. Automatic compensation eliminates mechanical adjustments. Output is pulsed from ON to OFF between 13.5 and 14.5 volts, with no trickle charge occurring between these points, making unit adaptable for use with nickel-cadmium batteries. *Vapor Heating Corp., Dept. RA, 6420 W. Howard St., Chicago 48.*

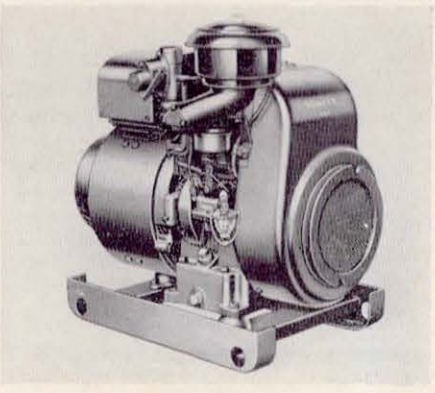


Short Haul Microwave

The new type UA-6-B microwave design provides a medium-to-short-haul multi-channel point-to-point communication system. Basically, it is a duplex radio transmission set operating over the range of 5,925 to 7,150 megacycles. It has a baseband capable of accommodating up to 240 voice channels. All vital circuits are easily metered, due to built in metering facilities and test points. *General Electric Co., Dept. RA, Lynchburg, Va.*

Oil-Level Gauge

A quick look at a Sure oil-level gauge tells how much oil there is in the crankcase of any type combustion engine—gasoline or diesel. It operates on engines with either 6- or 12-volt systems, or on 110-volt systems with transformers. The cork level is contained within a tubular steel casing mounted to the side of the crankcase. *Sure Gauge & Lock Co., Division of Waterworth Engineering, Dept. RA, 2329 Troy St., Dayton, Ohio.*



New Electric Plant

A new lightweight, compact 2-kw electric plant is available for continuous duty or standby service. It is powered by an air-cooled gasoline or combination gas-gasoline engine which is stated to have ample horsepower (5.6 hp at 1,800 rpm) for the rated output and for intermittent overloads up to 2.5 kw. The single-phase generator supplies 60-cycle ac current at 115 or 115-230 v. *Kohler Company, Dept. RA, Kohler, Wis.*

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LOOSENS THE TOUGH NUTS EVEN POWER WRENCHES CAN'T BUDGE!

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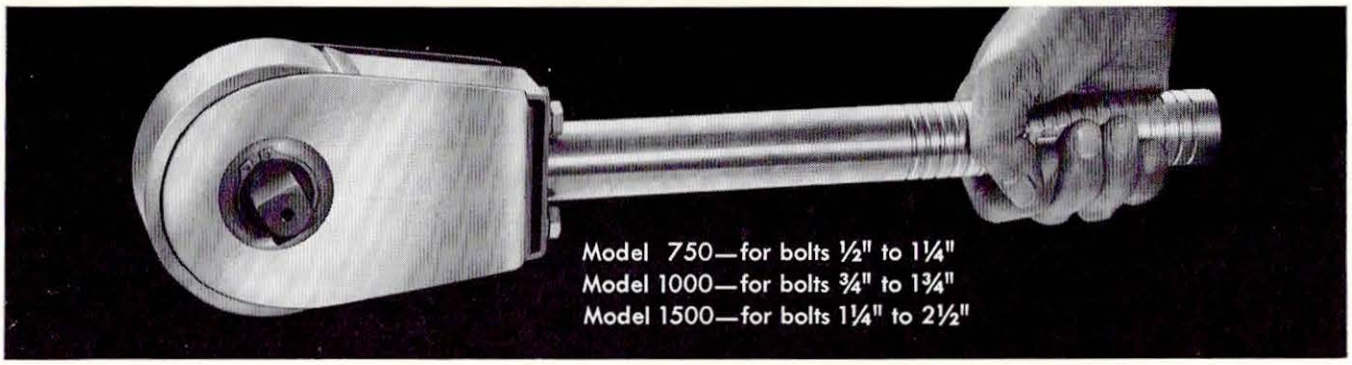

• Loosens "frozen" nuts in seconds **• Tightens nuts to maximum practical tightness**

There's never been anything like Swench before. It is an entirely new concept in wrench design. Swench is the world's *only manual impact wrench.* Here's what Swench means to you . . .

NEW SPEED—Nuts that previously had to be burned off can now be "Swenched off"—with unbelievable ease—by *one* man—in a matter of minutes.

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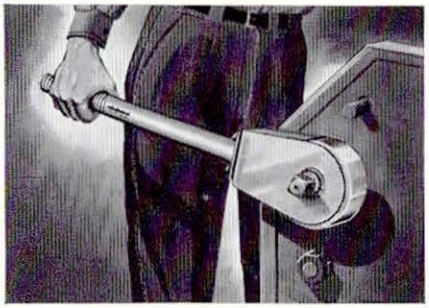
NEW SAFETY—With Swench there's no back-breaking, knuckle-knocking struggle . . . no dangerous handle extensions . . . no sudden release of a frozen nut . . . no shock transmitted through the handle.



See for yourself! Swench is so different from anything you've experienced, you'll have to see it in action to believe it. For a quick and convincing demonstration, contact Marquette.

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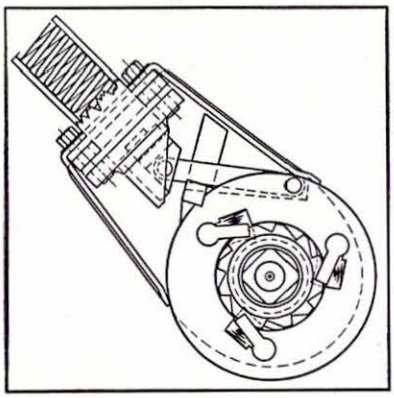
NEW VERSATILITY—*One* Swench can handle more bolt sizes than any power wrench . . . loosening or tightening requires no special adjustments.

NEW TENSIONING ACCURACY—Precise tightening is assured with Swench, following simple instructions.



INSIDE STORY—How is all this possible? Unlike power wrenches that deliver many tap-like blows, or ordinary manual wrenches that apply steady torque, Swench builds up power in its super-strong spring for a mighty wallop that is released as torsional impact every time the handle is advanced slightly more than 30 degrees.

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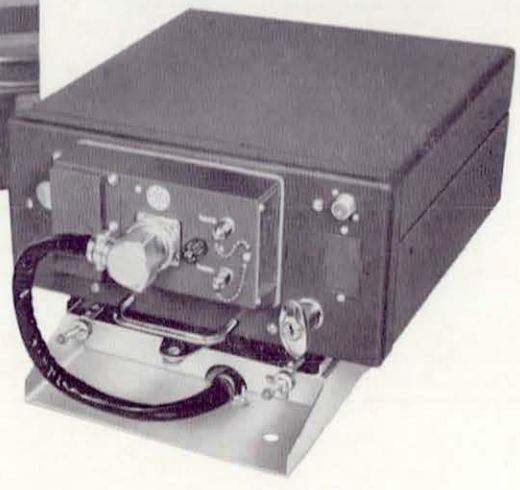
NEW FROM GraybaR

G-E RAILROAD RADIO

for locomotive and caboose



Complete package for either locomotive or caboose includes the following: Progress Line two-way radio transmitter and receiver chassis; standard A.A.R. type mounting base; base plate for radio unit; A.A.R. plug and cable terminated on A.A.R. labeled board; control head of aluminum, with handset.

Now — a G-E MOBILE RADIO designed specifically for locomotive and caboose communications. It is built to withstand rugged use. It delivers high signal power. It's compatible with G-E Progress Line automotive two-way radio systems, and provides the same high reliability and low service cost inherent in that equipment. Only G-E MOBILE RADIO provides so many of these big service and operating features.

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LOOK AT THE GE PRODUCT STORY

Designed to A.A.R. Specification 12-10 Paragraph C-9.

Interchangeable — Receiver and transmitter chassis for locomotive and caboose are interchangeable with those of Progress Line mobile units and space station equipment.

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Transmitter power output — 25 watts.

Voltage input — 117 volt AC 60-cycle; 12 volt DC; or 64 volt DC through rotary converter.

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Current Publications

FROM THE MANUFACTURER

BULLETIN NO. 4008. Upgrader Steam Cleaners. 8 pages, illustrated. Vapor Heating Corp., 80 E. Jackson Blvd., Chicago 4, Ill.

BULLETIN NO. 4010. Watertube Package Boilers. 8 pages, illustrated. Vapor Heating Corp., 80 E. Jackson Blvd., Chicago 4, Ill.

TECHNICAL BULLETIN 12-10. Comparative listings of characteristics of various types of steel tubing. Four pages. Joseph T. Ryerson & Son, Inc., Box 8000-A, Chicago 80, Ill.

NEW BOOKS

GOVERNMENT PROMOTION OF AMERICAN CANALS AND RAILROADS, 1800-1890, by Carter Goodrich. 382 pages, Columbia University Press, 2960 Broadway, New York 27. $7.50.

CAPITAL IN TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES: ITS FORMATION AND FINANCING, by Melville J. Ulmer. 548 pages, tables, charts. Princeton University Press, Princeton, N.J. $12.

AMERICAN BUILDING ART; THE NINETEENTH CENTURY, by Carl W. Condit. 371 pages, illustrations, drawings. Oxford University Press, 417 Fifth Ave., New York 16. $12.50.

REVOLUTION IN TRANSPORTATION, edited by Karl M. Ruppenth l. 153 pages. Stanford University, Graduate School of Business, Stanford, Cal. Hard-cover edition, $4.75; paper-cover, $3.75.

CHANGES IN LABOR COST DURING CYCLES IN PRODUCTION AND BUSINESS, by Thor Hultgren. 85 pages, tables, charts. National Bureau of Economic Research, 261 Madison ave., New York 16. Occasional Paper 74. $1.50

MODEL RAILWAYS AS A PASTIME, by Gerald Pollinger. 136 pages. Illustrations. Taplinger Publishing Co., Inc., 119 West 57th st., New York 19. $3.

THE DENVER & RIO GRANDE WESTERN RAILROAD; A GEOGRAPHIC ANALYSIS, by Frank H. Thomas. 269 pages, tables, charts, maps. Northwestern University Press, Evanston, Ill. Studies in Geography No. 4. No price given.

THE ILLUSTRATED STORY OF RAILROADS (in comic book form). 80 pages. Gilberton Co., 101 Fifth ave., New York 3. Single copies, 25 cents; quantities at lower prices.

LINCOLN'S JOURNEY TO GREATNESS; A FACTUAL ACCOUNT OF THE TWELVE-DAY INAUGURAL TRIP, by Victor Searcher. 279 pages, illustrations, end-paper maps. The John C. Winston Co., 1010 Arch st., Philadelphia 7. $4.50.

MODERN RAILWAYS: THEIR ENGINEERING, EQUIPMENT AND OPERATION, by Cecil J. Allen. 307 pages, illustrations. The Macmillan Company, 60 Fifth ave., New York 11. $9.

UNUSUAL LOCOMOTIVES, by Ernest F. Carter, 221 pages, illustrations, drawings. The Macmillan Company, 60 Fifth ave., New York 11. $4.50.

BULLETIN NO. 102. 78 pages, illustrations. Railway & Locomotive Historical Society, Baker Library, Harvard Business School, Boston. $2 to members; $3 to non-members.

MARKET OUTLOOK *at a glance*

Carloadings Drop 16.9% Below Previous Week's

Loadings of revenue freight in the holiday week ended July 9 totaled 456,330 cars, the Association of American Railroads announced on July 14. This was a decrease of 93,086 cars, or 16.9%, compared with the previous week; a decrease of 95,983 cars, or 17.4%, compared with the corresponding week last year; and a decrease of 35,236 cars, or 7.2%, compared with the equivalent 1958 week.

Loadings of revenue freight for the week ended July 2 totaled 549,416 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, July 2

District	1960	1959	1958
Eastern	80,317	86,501	64,420
Allegheny	86,591	106,933	72,199
Pocahontas	22,893	21,646	16,834
Southern	92,881	96,340	77,009
Northwestern	100,136	100,397	77,479
Central Western	115,437	110,979	105,344
Southwestern	51,161	51,306	47,060
Total Western Districts	266,734	262,682	229,883
Total All Roads	549,416	574,102	460,345
Commodities:			
Grain and grain products	64,973	63,426	67,276
Livestock	3,290	3,395	3,236
Coal	31,846	31,811	25,939
Coke	5,736	9,082	4,504
Forest Products	35,950	38,256	24,985
Ore	66,664	62,294	46,098
Merchandise l.c.l.	36,413	39,997	37,603
Miscellaneous	304,544	325,841	250,704
July 2	549,416	574,102	460,345
June 25	641,628	697,797	627,185
June 18	649,830	724,278	628,010
June 11	648,463	709,841	622,686
June 4	574,301	680,617	613,381
Cumulative total, 26 weeks	14,292,177	17,840,396	18,929,046

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended July 2 totaled 11,696 cars, compared with 8,420 for the corresponding 1959 week. Loadings for 1960 up to July 2 totaled 276,435 cars, compared with 203,319 for the corresponding period of 1959.

IN CANADA.—Carloadings for the nine-day period ended June 30 totaled 104,120 cars, compared with 78,867 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
June 30, 1960	104,120	34,755
June 30, 1959	114,005	36,827
Cumulative Totals		
June 30, 1960	1,793,473	738,244
June 30, 1959	1,823,742	719,674

New Equipment

FREIGHT-TRAIN CARS

► *June Bad Order Ratio 8.1%.*—Class I roads on June 1 owned 1,673,208 freight cars, 29,688 less than a year ago, according to AAR report summarized below. Bad order ratio was the same as on June 1, 1959.

	June 1, 1960	June 1, 1959	Change
Car Ownership	1,673,208	1,702,896	—29,688
Waiting repairs	135,331	137,432	— 2,101
Repair ratio	8.1%	8.1%	.....

LOCOMOTIVES—SPECIAL

► *163 Units Installed in First Three Months.*—Class I railroads installed 163 locomotive units (160 diesel-electric; one steam; two gas turbine-electric) in the first quarter of 1960, according to the AAR. In the first quarter of 1959, they installed 204 locomotive units (201 diesel-electric; three gas turbine-electric). Locomotive units on order April 1, 1960, totalled 329, of which 245 were diesel-electric, 66 electric, and 18 gas turbine-electric. On April 1, 1959, Class I railroads had 589 locomotive units on order, of which 566 were diesel-electric and 23 gas turbine-electric.

New Facilities

► *Canadian National.*—Will start construction this summer of a three-story, 72-bedroom YMCA in its Montreal hump yard.

► *Chicago & North Western.*—Is installing special plug-in electric service centers at 10 Chicago and suburban locations for pre-cooling and pre-heating electrically air conditioned and heated commuter equipment. Cost of installing the transformer facilities will be about $120,000.

► *Norfolk & Western.*—Will enlarge its Roanoke, Va., yard at a cost of almost $2,000,000. Project calls for 10.8 miles of new track and several minor channel changes of the Roanoke River. All track and signal work will be performed by company forces; channel changes and grading and filling work will be contracted. Track additions and changes will be made both in the main body of the yard and at its extreme west end. Additional yard tracks will permit simultaneous switching and classifying of a coal train and a time freight train.

► *Sudan.*—Plans to build 140 miles of branch lines of the Gezira Light Railway system in connection with completion of the $49-million Managil Irrigation Project. New lines will require 60 diesel locomotives and 900 freight cars, according to Foreign Commerce Weekly.

► *United Arab Republic.*—Invites bids until Aug. 12 for supply and installation of a CTC system. Control stations are to be installed at Alexandria, Tanta, Zagazig, Cairo, Assiut and Luxor. Bids must be submitted through an agent established in the UAR to the Director General, Telecommunications Organization, Ministry of Communications, Cairo.

LIRR Strike Hampers Commuters

It is difficult, but not impossible, for New York to get along temporarily without Long Island Rail Road passenger service. That seemed to be the conclusion of New Yorkers when the nation's busiest passenger railroad shut down operations completely last week. LIRR service ended at 12:01 a.m. July 10. Some of the railroad's 175,000 daily commuters stayed home Monday, July 11. Others formed car pools, hitchhiked, boated down Long Island Sound or took buses to city subway stations. Nobody liked it much, but most of them got there.

The reason Long Island's normally hectic traffic became almost chaotic was a long-threatened strike by Long Island Rail Road's 1,350 trainmen. The strike began after last minute negotiations called by N.Y. Governor Nelson Rockefeller failed to produce any basis for agreement between the two BRT lodges involved and the railroad. The strike had originally been called for June 19, but was postponed to allow time for Federal mediation.

At issue: The trainmen want a five-day week with no cut in pay from the seven days' pay they are now getting for a six-day schedule. The trainmen have also asked for other changes in agreements that would increase pay for certain positions.

A presidential emergency board, which heard the dispute under the Railway Labor Act, recommended that all of the union's demands be rejected, and that, in addition, the trainmen agree to railroad demands that it be given sole prerogative in adjustment of schedules and work assignments (RA, May 23, p. 38). The union rejected the emergency board proposals.

In later negotiations, the Long Island agreed to give the trainmen a five-day week, but stipulated that the trainmen would have to make concessions on work rules to permit economies that would cover the full cost of the change. This offer was also rejected by the union, and, other negotiations failing, the strike began.

Efforts to bring the strike to an end were begun immediately by the National Mediation Board and by a special State Board of Inquiry convened by the State Industrial Commissioner. Adding urgency to their efforts was the unhappy situation of the railroad's 175,000 daily commuters to New York.

No major traffic jams developed in the early part of the strike, partly because many commuters and businesses staggered office hours to extend the morning and evening peak traffic hours, and partly because car pools and additional bus capacity were available to bring Long Island commuters to the end of New York City Transit Authority lines in Queens and Brooklyn, where some parking regulations were suspended. Traffic was heavy, but there were few snarls. However, with highway traffic running at 20% above normal (during rush hours many Long Island highways are nearly filled to capacity with normal traffic), a major snarl remained a possibility.

As this issue of Railway Age went to press, there were hopeful signs from the negotiators that the strike would be ended promptly.

But, as the LIRR pointed out, the mere announcement that terms for a settlement had been reached would not be enough to start train wheels rolling immediately. To make sure that necessary equipment would be in the right locations, the Long Island said that it would have to resume operations at the same time of day it shut down: 12:01 a.m. In addition, the Long Island said, it would need at least eight hours of intensive work to make it possible to begin operations safely.

"It sounds like a long time," LIRR President Thomas M. Goodfellow said, "but, actually, we'll be able to get back into full, safe operation—and that word 'safe' is the one that's going to be the key in all our planning—much quicker by a midnight start than if we tried to begin at any other time of the day or night."

With safety the key factor in getting operations started again, Mr. Goodfellow said that many separate inspections would be needed. More than 250 miles of third rail (on which power was shut off when trainmen put pickets around sub-stations the railroad had hoped to keep open) will have to be checked, section by section, to make sure that it has not been damaged and that there is no one likely to be injured when the 650-volt power is turned on.

Also 150 grade crossing gates, another 150 flashers, and nearly 1,250 switches and signals will have to be inspected before the first train can run.

When train service begins, operations will be at restricted speeds until all rust has been cleared from the rails and until it has been determined that every crossing gate and signal is working properly.

For Transit: $2.7 Million

A meeting of the Philadelphia City Council has approved Mayor Richardson Dilworth's recommendation for a transit budget item of $2,700,000 in 1960. The sum will include both capital improvement funds and money for operation of the city's Passenger Service Improvement Corporation (RA, Jan. 25, p. 9).

Part of the capital improvement funds are slated to go for a new turnaround to be built at Torresdale to permit the city non-profit corporation to operate trains over a portion of the Pennsylvania Railroad main line to New York. This operation will be under a plan similar to that used in "Operation Northwest" and "Operation Northeast," the city-sponsored experiments with lower fares and increased service.

Another portion of the capital fund will be spent to buy what a city spokesman said would be "less than 10" new cars. Approximately $900,000 of the budget item will go for commuter operations, exclusive of capital improvements, for 1960.

City Solicitor David Berger, who has been instrumental in working out details of Mayor Dilworth's plans for improving Philadelphia transportation, told Railway Age, "An amount in excess of $1,000,000 for 1961 to operate under PSICP" has been approved. The amount in excess, he said, would depend on negotiations now in process between the city and the PRR and Reading railroads. Approximately $15,000,000 is slated to be spent for improvements in the next few years.

CF Advances White

William G. White, former vice president — operations of the Delaware, Lackawanna & Western, has been elected president of Consolidated Freightways, Inc. He succeeds J. L. S. Snead, Jr., who resigned following "disagreement with certain organizational policies of the board."

Mr. White left the Lackawanna to become senior vice president of CF last March 1 (RA, Feb. 15, p. 9). CF Chairman A. J. Gock said Mr. White's combined railroad-motor carrier experience "provides him with an excellent background for continuing the consolidation of our position and the improvement of profit margins."

Charles V. Colstadt
D&RGW

M. P. Richards
NYC

William L. Bailes, Jr.
N&W

Charles B. Deibel
Wabash

People in the News

BELT OF CHICAGO.—Norman F. Nissing appointed general agent, Portland, Ore., to succeed **A. R. Krull,** transferred to San Francisco.

H. C. Koch, roadmaster, Chicago, named resident engineer.

BURLINGTON.—R. L. Stevenson, general agent, CB&Q, Houston, Tex., appointed general agent, Burlington Lines, Oklahoma City, Okla., succeeding **B. C. Milliken,** who retired June 30.

Effective July 1, offices of Burlington Lines, comprised of the Chicago, Burlington & Quincy, Colorado & Southern and the Fort Worth & Denver, consolidated in offices of the FW&D at 303 Union Station Building, Houston.

John W. Weingarten, general attorney, Omaha, Neb., retired June 30.

CANADIAN PACIFIC—The department of industrial development has been realigned. **D. N. Cooper** and **A. B. Smith,** general industrial agents at Toronto, Ont., and Winnipeg, Man., respectively, named assistant managers, with the same headquarters as before.

CHICAGO & EASTERN ILLINOIS.—James H. Durkin, formerly an attorney with the Department of Justice, appointed general attorney, C&EI.

CHICAGO & ILLINOIS MIDLAND.—H. D. Hahn appointed assistant chief engineer, Springfield, Ill.

CHICAGO & NORTH WESTERN.—B. F. McDermott appointed division engineer, Nebraska division, Norfolk, Neb., succeeding **E. L. Hoffman,** retired.

DENVER & RIO GRANDE WESTERN.—Charles V. Colstadt, assistant superintendent of transportation, Denver, appointed superintendent of transportation there, succeeding **William C. Horner,** retired. **L. H. Pennington** named to succeed Mr. Colstadt.

W. C. Rubien, district freight and passenger agent, New York, retired June 30. **C. D. Brainard** appointed assistant general freight agent, Denver, Colo. **R. L. Detwiler** named depot passenger agent, Denver.

Joseph J. Schmidt appointed assistant director of research, Denver.

FRISCO.—R. J. Stone, vice president-operation, St. Louis, named vice president-executive department there. **L. W. Menk,** vice president and general manager, Springfield, Mo., succeeds Mr. Stone. **W. R. Allen,** assistant general manager, Springfield, appointed general manager there, and is succeeded by **W. W. Francis,** superintendent, Tulsa, Okla. **R. C. Grayson,** vice president and general manager, Frisco Transportation Co., Springfield, has exchanged positions with **J. W. Tipton,** general manager-sales, Frisco, St. Louis. **D. H. Andreas,** assistant district manager-sales, Memphis, Tenn., named district manager-sales, Oklahoma City, Okla., replacing **A. J. Morrow,** transferred to Memphis.

E. P. Olson appointed assistant to general manager, Springfield, Mo. **R. V. Holden,** car service supervisor, named assistant superintendent, Chickasha subdivision and Oklahoma City Yard, Oklahoma City, Okla., succeeding **C. C. Lane,** appointed superintendent, Southwestern division, Tulsa, Okla.

ILLINOIS CENTRAL.—John F. Sharkey, executive general agent, Chicago, retired July 1.

John L. Sharpe, auditor of passenger and station accounts, retired June 30. Effective July 1, offices of auditor of passenger and station accounts and auditor of freight receipts consolidated into the new office of freight receipts, appointed auditor of reve-auditor of revenues. **Edward Mech,** auditor of nues. **Wayne R. Lindahl,** assistant auditor of freight receipts, and **Frank J. Ulreich,** assistant auditor of passenger and station accounts, named assistant auditors of revenue. **William A. Smith,** assistant freight claim agent, promoted to freight claim agent, succeeding **Cyril J. Cooney** (RA, June 27, p. 71).

Ernie W. Young, assistant freight claim agent, named superintendent of loss and damage prevention and perishable service.

NEW YORK CENTRAL.—Ralph I. Renfrew, manager of purchases and stores, New York, retired June 30. **M. P. Richards,** manager of stores, appointed director of purchases. **H. L. Riser,** purchasing agent, named purchasing agent—new equipment and surplus property sales. **W. J. Haggerty,** assistant manager of stores, appointed purchasing agent—maintenance of way materials and equipment. **R. W. Friedel,** purchasing agent—locomotives, cars, named director of stores. **W. J. D. Balsden,** general storekeeper, Collinwood, Ohio, appointed assistant director of stores—materials and supplies. **C. E. Miller,** assistant manager of stores, named assistant director of stores—methods and procedures. Positions of manager, purchases and stores, manager of stores, and assistant managers of stores, abolished.

Donald J. Kaye, terminal operations analyst, appointed supervisor—freight sales and service.

NORFOLK & WESTERN.—William L. Bailes, Jr., assistant coal traffic manager, named assistant vice president—coal traffic.

John T. Adams, Jr., assistant commerce agent, appointed assistant general freight agent, succeeding **Lawrence P. Murray** (RA, July 11, p. 44). **Howard E. Tuttle** succeeds Mr. Adams.

William R. McClelland, assistant freight traffic manager, Cincinnati, Ohio, has resigned to enter private business.

READING.—Howard E. Simpson, president of the **Baltimore & Ohio** at Baltimore, Md., elected chairman of the board of the Reading, succeeding **R. B. White,** who resigned June 28.

William F. Dervan appointed commercial coal agent, Reading, at 424 Chamber of Commerce Building, 80 Federal Street, Boston 10, Mass.

SOO LINE.—Howard E. Salo appointed general agent, San Francisco, replacing **Edgar M. Ostby,** retired.

A. H. Young named chief, Department of Investigation and Protection, Minneapolis, to succeed **R. T. Sandgren,** who retired June 30. **J. J. Simonet,** assistant manager, personnel and safety, retired June 30.

H. F. Schumacher appointed freight claim agent, Minneapolis, succeeding **A. E. Larson,** retired.

D. L. Borchert appointed general mechanical superintendent, Minneapolis, to replace **C. F. Guggisberg,** who retired June 30.

WABASH.—Charles B. Deibel, assistant to the president, St. Louis, elected vice president, secretary and treasurer. The road's financial and corporate offices have been moved from New York to St. Louis. Certain functions such as stock transfers and the handling of interest and principal payments on mortgage debts and equipment trust obligations will remain at New York. **H. F. Brauch,** chief clerk in the executive department, and **Joseph Pakush,** chief clerk, named assistant secretaries. **J. M. Fricke,** local treasurer, and **R. L. Mulkeen,** transfer agent, appointed assistant treasurers.

WESTERN PACIFIC.—Malcolm W. Roper, vice president-marketing, elected vice president and assistant to the president. **Walter C. Brunberg,** assistant vice president-marketing, succeeds Mr. Roper.

Supply Trade

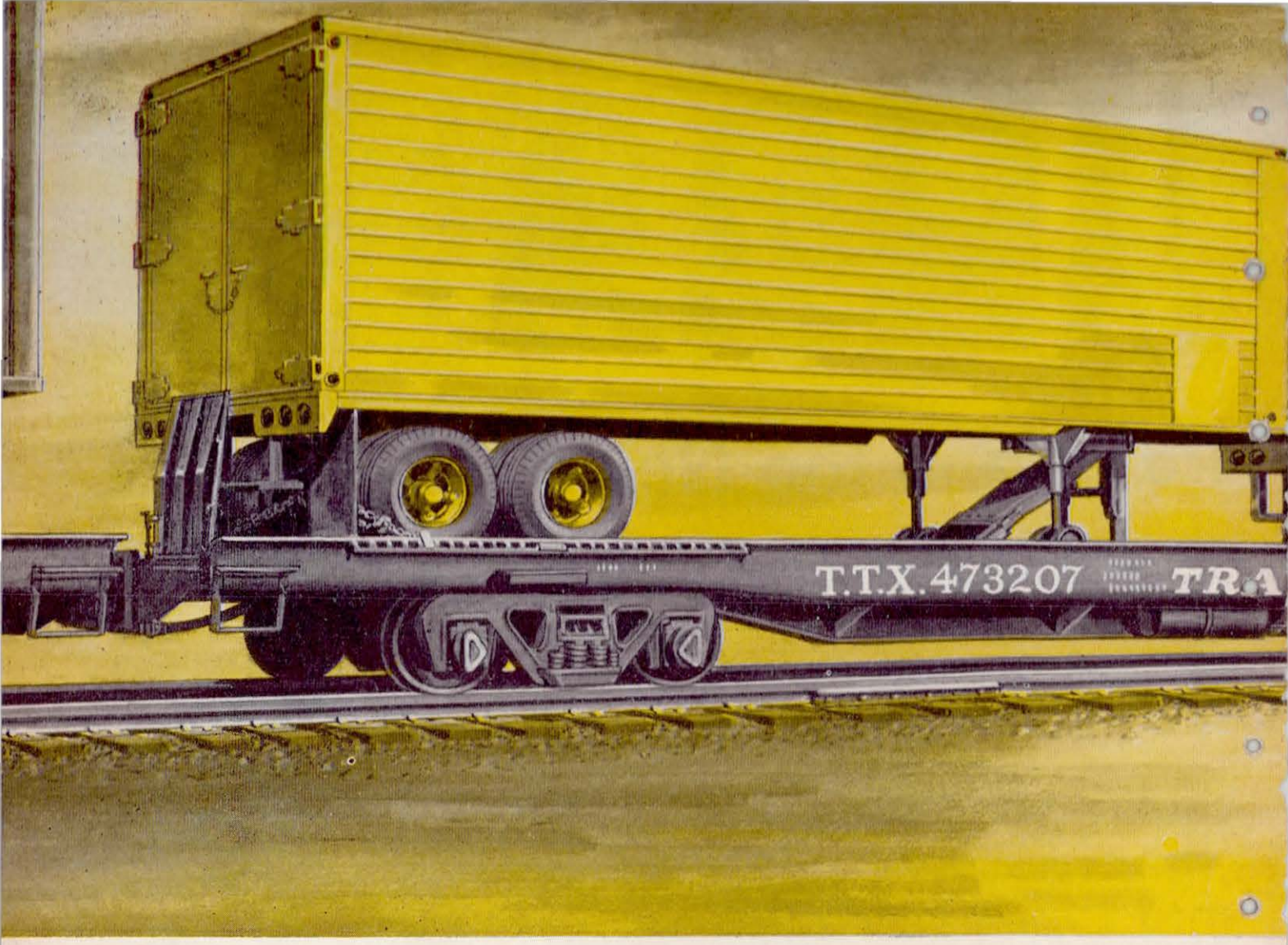
Milton W. Meyers has been appointed to the newly created position of vice president—administration, **W. H. Miner, Inc.**

William S. Thompson, secretary-treasurer, **Hayes Steel Products, Ltd.,** has been elected vice president-finance and secretary.

Hermann K. Intemann, president of **Union Carbide Metals Co.,** has been named director of purchases, **Union Carbide Corp. William H. Feathers,** president, **National Carbon Co.,** succeeds Mr. Intemann, and in turn is succeeded by **James R. Johnstone,** administrative assistant to the president, National Carbon.

John B. Cruell, area manager, Industrial division, **Nalco Chemical Co.,** New York, has been advanced to manager, Southern California district, Glendale, Cal., succeeding **J. T. Nicholson,** resigned. **John H. Gallagher,** service representative, Eastern district, has been promoted to manager, New York City office, succeeding Mr. Cruell.

Lloyd J. Ely, director of manufacturing for domestic operations, **Caterpillar Tractor Co.,** has been named a vice president of the Foreign Trade Group. **Gordon Swardenski,** assistant manager of the Peoria, Ill. plant, succeeds Mr. Ely.



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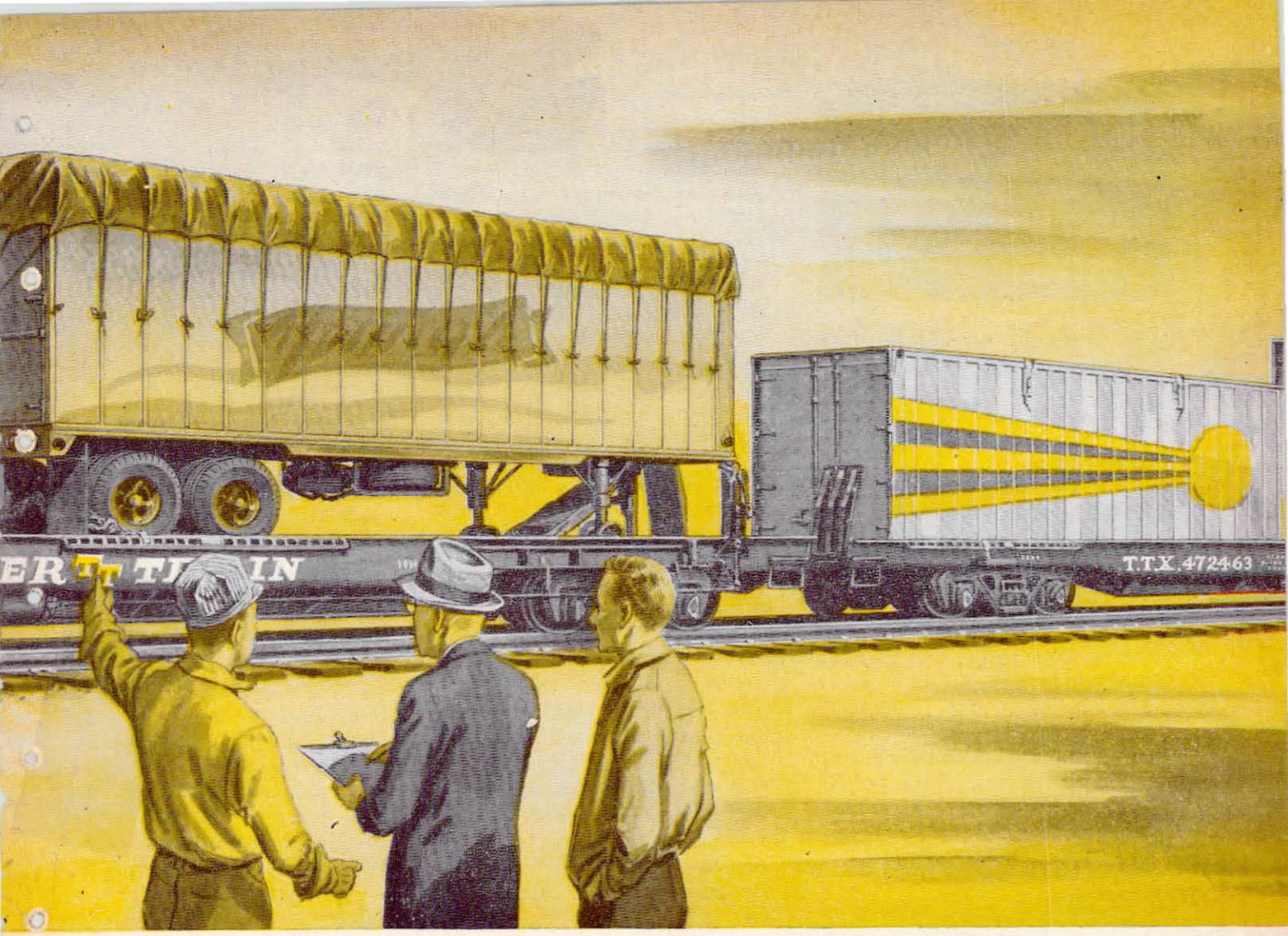

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You Ought To Know...

L&N scheduled ground-breaking ceremonies for July 16 at its De-Coursey, Ky., yard, where $11,500,000 will be spent in a four-year project to enlarge and modernize the plant. Expenditures during 1960 will total about $1,500,000, mostly for grading and drainage work.

A new regional data office, part of the Milwaukee's expanding electronic freight accounting system, will be opened Aug. 1 in Milwaukee, Wis. Rating and billing services handled at the center will apply to shippers in Milwaukee and 73 other points in three states. Bills will be sent direct to the shipper and he'll be asked to send remittance to the regional office, rather than to a local agent.

Elimination of 49 grade crossings at a cost of $42.8 million is being considered by New Jersey's State Board of Public Utility Commissioners. Since World War II 31 grade crossings have been eliminated at a cost of $15.2 million. Work scheduled on seven other grade crossings will cost an estimated $21 million. The state pays 85% of the cost, the railroads 15%.

Railroad employment in mid-June stood at 807,418—5.11% below June 1959, according to the ICC's Bureau of Transport Economics and Statistics. Biggest drop was among maintenance of equipment and stores employees, 7.5%.

The National Museum of Transport will occupy a 65-acre tract near its present site at Kirkwood, Mo., when a planned $5,000,000 expansion project is completed. Eight new buildings, housing historic equipment, a library and classrooms, will provide a comprehensive representation of major forms of transportation.

Consolidation of diesel locomotive servicing and repair work from three locations into two at Chicago has been completed by the IC. Under the present setup, passenger power and freight units operating out of Congress Street are handled at IC's 27th Street roundhouse. All other power is serviced at Markham Yard (171st Street). Previously, IC maintained servicing facilities at Burnside (95th Street), also did annuals and truck work there to supplement the 27th Street operation.

Railroad earnings in 1960 "could total around $675 million," compared with $568 million in 1959, if business takes an expected upturn by Labor Day, says Standard & Poor's Industry Surveys.

Illinois Commerce Commission regulations have been modified to permit Consolidated Southern Lines, Inc., to attach "pup" semi-trailers to buses on regular runs between East St. Louis and Cairo. Pup units will be used to haul express and packages. The commission's order approves them for use on a temporary trial period and applies only to operations of Consolidated Southern Lines.

ICC has authorized the M&StL to discontinue its last two remaining passenger trains, now operating between Minneapolis, Minn., and Watertown, S. D. Loss of M&StL mail contracts last May was attributed in part by the ICC as reason for dropping the money-losing trains. During the past two years up to 74 per cent of the trains' total revenues came from hauling mail. (RA Feb. 22, p. 38).

XTRA, Inc., a Boston firm which rents highway trailers and containers to railroads and other carriers on a per diem basis, has accepted delivery of 39 Freightmaster vans from Highway Trailer Co. Thirty of the new units are especially-designed 35-ft trailers with removable bogies. They will be used in piggyback service between the U. S. and Canada. U.S.-licensed bogies can be removed and replaced by Canadian-licensed units, and vice versa.

Plan III piggyback now accounts for approximately 23% of the Pennsylvania's TrucTrain business. PRR made this point last week in announcing the inauguration of Plan III service (effective July 15) between the New York City metropolitan area and Buffalo.

Corporate reorganization of the BAR has been advanced a step. A registration statement is being filed with the SEC for the common stock of the Bangor & Aroostook Corp. which, under the reorganization plan, will be issued in exchange for present stock in the railroad.

A meeting of the Executive and Enforcement committees of the National Conference of State Transportation Specialists at Springfield, Ill., July 27-28, will consider appointment of subcommittees to deal with safety matters and to promote uniform motor carrier acts. The group will also formulate plans for a "workshop" to be presented at the NARUC fall convention in Las Vegas.

GN passenger trainmen are sporting new uniforms. Dark blue, cuffless trousers and matching business suit type coat are worn with a military style cap. A maroon tie —either bow or four-in-hand— completes the modernization.

First bulk rail shipment of a plastics raw material to the Pacific Coast area recently reached Santa Ana Plastic Film division of Rexall Drug & Chemical Co., Santa Ana, Calif. The shipment—115,000 lb of Tenite polyethylene resin—originating at Longview, Tex., was supplied by Eastman Chemical Products. The bulk shipment system, with virtually automatic loading and unloading of rail cars, saves both time and labor compared with previous truck shipment in 50-lb bags.

Electrification of all lines of the Swiss Federal Railways was completed May 30, 1960. This was accomplished by replacing steam power with electric on the line which runs from Cadenatto to Luino, a distance of 20 miles.

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Conserve 'Political Capital'

Well-managed railroads usually allocate funds available for additions and betterments to those projects which promise the highest return in relation to the money expended. But what about railroads' "political capital"—are expenditures of this resource paid out with equal attention to getting the maximum return in ratio to the outlay?

Every individual railroad, and the industry as a whole, has urgent need for remedial legislation (or for corrective action by regulators and government administrators) to equalize the railroads' competitive position with that of their rivals. As a means of securing improved opportunity to compete, every railroad, and the industry as a whole, has on deposit—with governmental authorities—a reservoir of good-will. This reservoir may be relatively well filled in some places, and almost empty in others, but it does exist.

The railroads drew on their deposit of political capital when Congress enacted the Transportation Act of 1958. The industry makes a withdrawal from the same account every time it is involved in a controversial case before one of the regulatory commissions, or with local taxing authorities.

This political capital the railroads have on deposit is, at best, a limited amount. It must be conserved—doled out like irrigation water in an arid countryside. Scarce water must be saved for the paying crops, not wasted on the weeds.

A well-known railroad lawyer, B&O vice president Jervis Langdon, Jr., focused attention on this situation at the recent annual meeting of railroad public relations officers (RA, June 13, p. 50). As his personal opinion, he suggested that regulation of common carrier trucks has by no means made competition with these carriers easier for railroads. Even though extension of regulation to additional motor carriers is justifiable, he has no high hopes that such action will materially improve the railroads' competitive position.

He would conclude, apparently, that a situation like this is one in which railroads might well be sparing in paying out their political capital, conserving it, rather, for use in behalf of projects which he believes are more likely to provide a dollars-and-cents return to railroads.

If Mr. Langdon had his choice, he would be more inclined to favor railroads' drawing on their account of legislative good-will, primarily, for those projects which would make sure "that the railroads are free to advance and fully exploit their competitive capabilities in the race for traffic."

There would probably not be complete unanimity of opinion among railroad leaders as to just what measures of legislative or regulatory modernization would be most productive of immediate and tangible benefits. But regardless of just what particular projects are most likely to prove helpful, it certainly is not amiss to look at the list of possible objectives from the standpoint of their relative profitability and practicability.

The determined effort a couple of large railroads are putting forth, to be allowed to engage in barge transportation, seems to us to illustrate admirably a practical approach to a political situation. Barge transportation is less than 10% under regulation. Most railroads favor extension of regulation to unregulated barge operations, but it is going to take time to accomplish this objective. Meantime, these two railroads are not allowing theoretical considerations regarding transportation regulation to deter them from meeting their competitive situation by endeavoring to get into the barge business.

No publication or organization in the country, to our knowledge, has done battle longer or more persistently than this paper for levying compensatory charges for the use of publicly owned transportation plant. We have sustained this position, however, in the full knowledge that we were carrying on a campaign in behalf of the public treasury, and in behalf of general taxpayers—not primarily in the selfish interest of railroads. It is sound and proper that railroad people, as substantial citizens, should make known the facts in such cases (e.g., as Mr. H. C. Murphy did in his article in our June 27 issue)—and endeavor to interest public groups in understanding the basic issues. But railroads ought not to have to carry on political contests practically unaided in defense of the public treasury.

●

It is nothing more than sound management practice to expend capital assets thriftily—to do the investing where the least dollars of expenditure will produce the most dollars in return. The same principle applies in making withdrawals from the account of public and governmental good-will.

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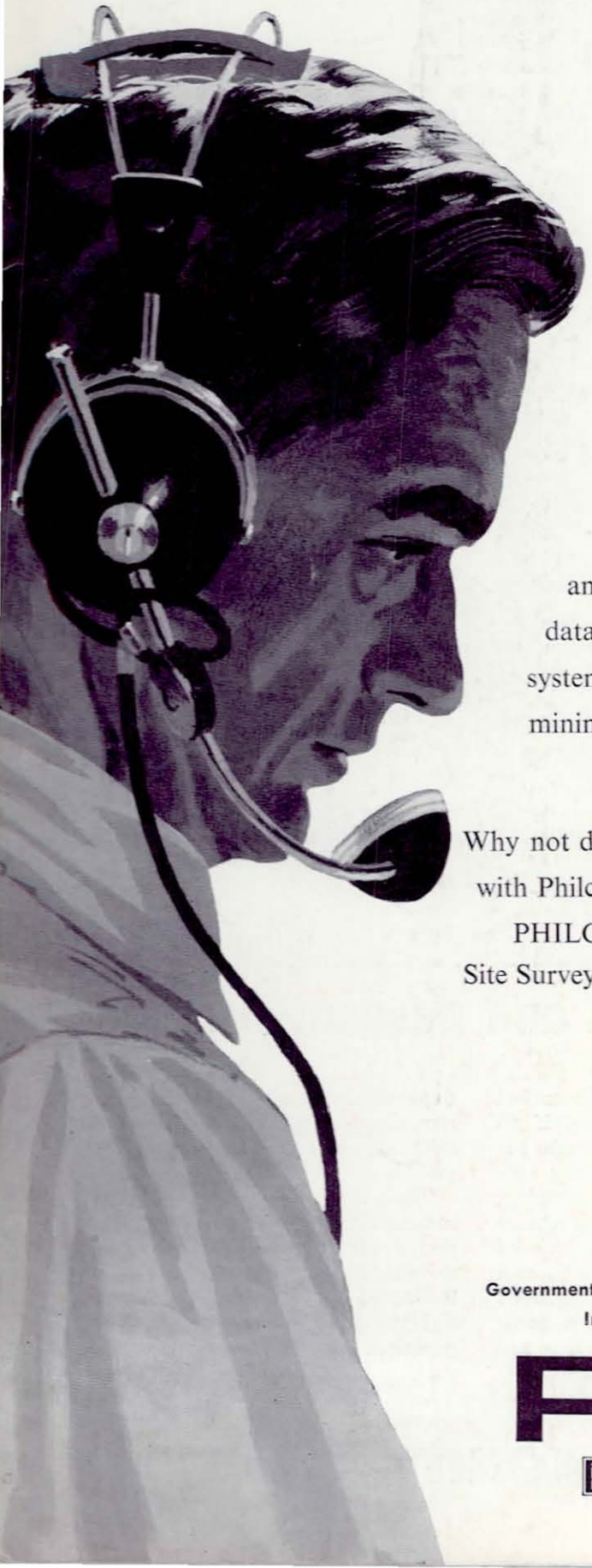

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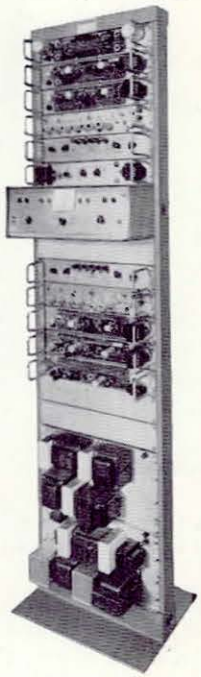

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